

Ser Asp Met Met Gly Leu Leu Lys Thr Phe Ser Cys His Lys Glu
 145 150 155 160
 Phe Gln Thr Val Pro Phe Tyr Ile Phe Ser Glu Ser Tyr Gly Gly Lys
 165 170 175
 Met Ala Ala Gly Ile Gly Leu Glu Leu Tyr Lys Ala Ile Gln Arg Gly
 180 185 190
 Thr Ile Lys Cys Asn Phe Ala Gly Val Ala Leu Gly Asp Ser Trp Ile
 195 200 205
 Ser Pro Val Asp Ser Val Leu Ser Trp Gly Pro Tyr Leu Tyr Ser Met
 210 215 220
 Ser Leu Leu Glu Asp Gly Leu Ala Glu Val Ser Lys Val Ala Glu
 225 230 235 240
 Gln Val Leu Asn Ala Val Asn Lys Gly Leu Tyr Arg Glu Ala Thr Glu
 245 250 255
 Leu Trp Gly Lys Ala Glu Met Ile Ile Glu Gln Val Lys Arg Gly Asn
 260 265 270
 Thr Gln Arg Arg Ala Cys Leu Ala Phe Ser Gly Gly Tyr Arg Ala His
 275 280 285
 Gly Trp Cys Cys Gln Thr Trp Ser Leu His
 290 295 298

<210> 911
 <211> 213
 <212>Amino acid
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(213)
 <223> X = any amino acid or stop code

<400> 911
 Pro Gly Trp Ser Arg Ser Pro Asp Leu Val Ile Arg Leu Pro Arg Pro
 1 5 10 15
 Pro Lys Val Leu Gly Leu Gln Tyr Tyr His Phe Phe Phe Leu Arg
 20 25 30
 Trp Ser Leu Asp Ser Val Ala Gln Ala Glu Val Gln Trp His Asp Leu
 35 40 45
 Arg Ser Leu Gln Ala Pro Pro Pro Gly Phe Thr Pro Phe Ser Cys Leu
 50 55 60
 Ser Leu Pro Gly Ser Trp Asp Tyr Arg Cys Pro Pro Pro Arg Pro Ala
 65 70 75 80
 Asn Phe Leu Tyr Phe Xaa Xaa Arg Arg Gly Phe Thr Val Leu Ala Arg
 85 90 95
 Met Val Ser Ile Ser Xaa Pro Arg Asp Pro Pro Ala Ser Ala Ser Gln
 100 105 110
 Ser Ala Gly Ile Thr Val Leu Ser Leu Phe Phe Phe Phe Glu Met Glu
 115 120 125
 Ser Cys Ser Val Ala Gln Ala Gly Val Gln Trp Arg Tyr Leu Gly Ser
 130 135 140
 Leu Gln Ala Leu Pro Pro Gly Phe Thr Pro Phe Ser Cys Leu Ser Leu
 145 150 155 160
 Pro Ser Ser Trp Asp Tyr Arg Arg Pro Pro Pro Arg Pro Ala Asn Phe
 165 170 175
 Phe Val Phe Leu Val Glu Thr Gly Val Ser Pro Cys Xaa Pro Gly Trp
 180 185 190
 Ser Arg Ser Pro Asp Leu Val Ile Arg Leu Pro Gln Pro Pro Lys Val
 195 200 205
 Leu Gly Leu Gln Val

210 213

<210> 912
<211> 583
<212>Amino acid
<213> Homo sapiens

<400> 912
Pro Ser Met Lys Thr Gly Glu Leu Glu Lys Glu Thr Ala Pro Leu Arg
1 5 10 15
Lys Asp Ala Asp Ser Ser Ile Ser Val Leu Glu Ile His Ser Gln Lys
20 25 30
Ala Gln Ile Glu Glu Pro Asp Pro Pro Glu Met Glu Thr Ser Leu Asp
35 40 45
Ser Ser Glu Met Ala Lys Asp Leu Ser Ser Lys Thr Ala Leu Ser Ser
50 55 60
Thr Glu Ser Cys Thr Met Lys Gly Glu Glu Lys Ser Pro Lys Thr Lys
65 70 75 80
Lys Asp Lys Arg Pro Pro Ile Leu Glu Cys Leu Glu Lys Leu Glu Lys
85 90 95
Ser Lys Lys Thr Phe Leu Asp Lys Asp Ala Gln Arg Leu Ser Pro Ile
100 105 110
Pro Glu Glu Val Pro Lys Ser Thr Leu Glu Ser Glu Lys Pro Gly Ser
115 120 125
Pro Glu Ala Ala Glu Thr Ser Pro Pro Ser Asn Ile Ile Asp His Cys
130 135 140
Glu Lys Leu Ala Ser Glu Lys Glu Val Val Glu Cys Gln Ser Thr Ser
145 150 155 160
Thr Val Gly Gly Gln Ser Val Lys Lys Val Asp Leu Glu Thr Leu Lys
165 170 175
Glu Asp Ser Glu Phe Thr Lys Val Glu Met Asp Asn Leu Asp Asn Ala
180 185 190
Gln Thr Ser Gly Ile Glu Glu Pro Ser Glu Thr Lys Gly Ser Met Gln
195 200 205
Lys Ser Lys Phe Lys Tyr Lys Leu Val Pro Glu Glu Glu Thr Thr Ala
210 215 220
Ser Glu Asn Thr Glu Ile Thr Ser Glu Arg Gln Lys Glu Gly Ile Lys
225 230 235 240
Leu Thr Ile Arg Ile Ser Ser Arg Lys Lys Pro Asp Ser Pro Pro
245 250 255
Lys Val Leu Glu Pro Glu Asn Lys Gln Glu Lys Thr Glu Glu Glu
260 265 270
Glu Lys Thr Asn Val Gly Arg Thr Leu Arg Arg Ser Pro Arg Ile Ser
275 280 285
Arg Pro Thr Ala Lys Val Ala Glu Ile Arg Asp Gln Lys Ala Asp Lys
290 295 300
Lys Arg Gly Glu Gly Glu Asp Glu Val Glu Glu Ser Thr Ala Leu
305 310 315 320
Gln Lys Thr Asp Lys Lys Glu Ile Leu Lys Lys Ser Glu Lys Asp Thr
325 330 335
Asn Ser Lys Val Ser Lys Val Lys Pro Lys Gly Lys Val Arg Trp Thr
340 345 350
Gly Ser Arg Thr Arg Gly Arg Trp Lys Tyr Ser Ser Asn Asp Glu Ser
355 360 365
Glu Gly Ser Gly Ser Glu Lys Ser Ser Ala Ala Ser Glu Glu Glu Glu
370 375 380
Glu Lys Glu Ser Glu Glu Ala Ile Leu Ala Asp Asp Asp Glu Pro Cys
385 390 395 400
Lys Lys Cys Gly Leu Pro Asn His Pro Glu Leu Ile Leu Cys Asp

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ser | Cys | Asp | Ser | Gly | Tyr | His | Thr | Ala | Leu | Pro | Phe | Ala | Pro | Pro | Leu |
| | | | | | | | | | | | | | | | 415 |
| | | | | | | | | | | | | | | | 430 |
| Met | Ile | His | Pro | Gln | Met | Gly | Gly | Trp | Phe | Cys | Pro | Thr | Phe | Cys | Pro |
| | | | | | | | | | | | | | | | 445 |
| Thr | Leu | Asn | Leu | Leu | Leu | Leu | Glu | Lys | Leu | Glu | Asp | Gln | Phe | Gln | Asp |
| | | | | | | | | | | | | | | | 460 |
| Leu | Asp | Val | Ala | Leu | Lys | Glu | Arg | Ala | Leu | Pro | Glu | Arg | Arg | Lys | 475 |
| | | | | | | | | | | | | | | | 480 |
| Glu | Arg | Leu | Val | Tyr | Val | Gly | Ile | Ser | Ile | Glu | Asn | Ile | Ile | Pro | Pro |
| | | | | | | | | | | | | | | | 495 |
| Gln | Glu | Pro | Asp | Phe | Ser | Glu | Asp | Gln | Glu | Glu | Lys | Lys | Lys | Lys | Asp |
| | | | | | | | | | | | | | | | 510 |
| Lys | Lys | Ser | Lys | Ala | Asn | Leu | Leu | Glu | Arg | Arg | Ser | Thr | Arg | Thr | Arg |
| | | | | | | | | | | | | | | | 525 |
| Lys | Cys | Ile | Ser | Tyr | Arg | Phe | Asp | Glu | Phe | Asp | Glu | Ala | Ile | Asp | Glu |
| | | | | | | | | | | | | | | | 540 |
| Ala | Ile | Glu | Asp | Asp | Ile | Lys | Glu | Ala | Asp | Gly | Gly | Gly | Val | Gly | Arg |
| | | | | | | | | | | | | | | | 560 |
| Gly | Lys | Asp | Ile | Ser | Thr | Ile | Thr | Gly | His | Arg | Gly | Lys | Asp | Ile | Ser |
| | | | | | | | | | | | | | | | 575 |
| Thr | Ile | Leu | Asp | Glu | Glu | Arg | | | | | | | | | |
| | | | | 580 | 583 | | | | | | | | | | |

<210> 913
<211> 178
<212>Amino acid
<213> Homo sapiens

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Arg | Arg | Gly | Ser | Phe | Lys | Met | Ala | Glu | Leu | Asp | Gln | Leu | Pro | Asp |
| 1 | | | | | | | 5 | | 10 | | | | | 15 | |
| Glu | Ser | Ser | Ser | Ala | Lys | Ala | Leu | Val | Ser | Leu | Lys | Glu | Gly | Ser | Leu |
| | | | | | | | | 20 | | 25 | | | | 30 | |
| Ser | Asn | Thr | Trp | Asn | Glu | Lys | Tyr | Ser | Ser | Leu | Gln | Lys | Thr | Pro | Val |
| | | | | | | | 35 | | 40 | | | | 45 | | |
| Trp | Lys | Gly | Arg | Asn | Thr | Ser | Ser | Ala | Val | Glu | Met | Pro | Phe | Arg | Asn |
| | | | | | | | | 50 | | 55 | | | 60 | | |
| Ser | Lys | Arg | Ser | Arg | Leu | Phe | Ser | Asp | Glu | Asp | Asp | Arg | Gln | Ile | Asn |
| | | | | | | | 65 | | 70 | | | 75 | | | 80 |
| Thr | Arg | Ser | Pro | Lys | Arg | Asn | Gln | Arg | Val | Ala | Met | Val | Pro | Gln | Lys |
| | | | | | | | 85 | | 90 | | | | 95 | | |
| Phe | Thr | Ala | Thr | Met | Ser | Thr | Pro | Asp | Lys | Ala | Ser | Gln | Lys | Ile | |
| | | | | | | | 100 | | 105 | | | | 110 | | |
| Gly | Phe | Arg | Leu | Arg | Asn | Leu | Leu | Lys | Leu | Pro | Lys | Ala | His | Lys | Trp |
| | | | | | | | 115 | | 120 | | | | 125 | | |
| Cys | Ile | Tyr | Glu | Trp | Phe | Tyr | Ser | Asn | Ile | Asp | Lys | Pro | Leu | Phe | Glu |
| | | | | | | | 130 | | 135 | | | | 140 | | |
| Gly | Asp | Asn | Asp | Phe | Cys | Val | Cys | Leu | Lys | Glu | Ser | Phe | Pro | Asn | Leu |
| | | | | | | | 145 | | 150 | | | | 155 | | 160 |
| Lys | Thr | Arg | Lys | Leu | Thr | Arg | Val | Glu | Trp | Gly | Lys | Ile | Arg | Arg | Leu |
| | | | | | | | 165 | | 170 | | | | 175 | | |
| Met | Gly | | | | | | 178 | | | | | | | | |

<210> 914
<211> 158
<212>Amino acid

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(158)

<223> X = any amino acid or stop code

<400> 914

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Pro | Glu | Tyr | Leu | Arg | Lys | Arg | Phe | Gly | Gly | Ile | Arg | Ile | Pro | Ile |
| 1 | | | | 5 | | | | | 10 | | | | 15 | | |
| Ile | Leu | Ala | Val | Ile | Tyr | Leu | Phe | Ile | Tyr | Ile | Phe | Thr | Lys | Ile | Ser |
| | | | | | '20 | | | | 25 | | | | 30 | | |
| Val | Asp | Met | Tyr | Ala | Gly | Ala | Ile | Phe | Ile | Gln | Gln | Ser | Leu | His | Leu |
| | 35 | | | | | | 40 | | | | 45 | | | | |
| Asp | Leu | Tyr | Leu | Ala | Ile | Val | Gly | Leu | Leu | Ala | Ile | Thr | Ala | Val | Tyr |
| | 50 | | | | | | 55 | | | | 60 | | | | |
| Thr | Val | Ala | Gly | Gly | Leu | Ala | Ala | Val | Ile | Tyr | Thr | Asp | Ala | Leu | Gln |
| | 65 | | | | | | 70 | | | | 75 | | | 80 | |
| Thr | Leu | Ile | Met | Leu | Ile | Gly | Ala | Leu | Thr | Leu | Met | Gly | Tyr | Ser | Phe |
| | 85 | | | | | | | | | 90 | | | 95 | | |
| Ala | Ala | Val | Gly | Gly | Met | Glu | Gly | Leu | Lys | Tyr | Phe | Leu | Ala | | |
| | 100 | | | | | | | 105 | | | | 110 | | | |
| Leu | Ala | Ser | Asn | Arg | Ser | Glu | Asn | Ser | Ser | Cys | Gly | Leu | Pro | Arg | Glu |
| | 115 | | | | | | | 120 | | | | 125 | | | |
| Asp | Ala | Phe | His | Ile | Phe | Arg | Asp | Pro | Leu | Thr | Ser | Asp | Leu | Pro | Trp |
| | 130 | | | | | | 135 | | | | 140 | | | | |
| Pro | Gly | Val | Leu | Phe | Gly | Met | Ser | Ile | Pro | Ser | Leu | Xaa | * | | |
| 145 | | | | | | 150 | | | | 155 | | 157 | | | |

<210> 915

<211> 108

<212>Amino acid

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(108)

<223> X = any amino acid or stop code

<400> 915

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Kaa | Ser | Ala | Ser | Ala | Thr | Ser | Leu | Thr | Leu | Ser | His | Cys | Val | Asp | Val |
| 1 | | | | | 5 | | | | 10 | | | 15 | | | |
| Val | Lys | Gly | Leu | Ile | Asp | Phe | Lys | Lys | Arg | Arg | Gly | His | Ser | Ile | Gly |
| | | | | | | | 20 | | 25 | | | | 30 | | |
| Gly | Ala | Ala | Pro | Glu | Gln | Arg | Tyr | Gln | Ile | Ile | Pro | Val | Met | Cys | Cys |
| | | | | | | | | 35 | | 40 | | | 45 | | |
| Leu | Leu | Ala | Thr | Gly | Gly | Ala | Asp | Arg | Leu | Ile | His | Leu | Trp | Asn | Val |
| | | | | | | | | 50 | | 55 | | 60 | | | |
| Val | Gly | Ser | Arg | Leu | Glu | Ala | Asn | Gln | Thr | Leu | Glu | Gly | Ala | Gly | Gly |
| | 65 | | | | | | | 70 | | | 75 | | 80 | | |
| Ser | Ile | Thr | Ser | Val | Asp | Phe | Asp | Pro | Ser | Gly | Tyr | Gln | Val | Leu | Ala |
| | | | | | | | 85 | | | 90 | | 95 | | | |
| Ala | Thr | Tyr | Asn | Gln | Val | Ala | Gln | Phe | Trp | Lys | * | | | | |
| | | | | | | | 100 | | 105 | | 107 | | | | |

<210> 916
<211> 45
<212>Amino acid
<213> Homo sapiens

<400> 916
Gln Lys Arg Phe Pro Ser Asn Cys Gly Arg Asp Gly Lys Leu Phe Leu
1 5 10 15
Trp Gly Gln Ala Leu His Ile Ile Ala Lys Leu Leu Gly Lys Trp Arg
20 25 30
Arg Leu Gly Met Val Phe Phe Ser Leu Leu Leu Ser Tyr
35 40 45

<210> 917
<211> 180
<212>Amino acid
<213> Homo sapiens

<400> 917
Val His Val Cys Ser Ser Lys Met Gly Ala Leu Ser Thr Glu Arg Leu
1 5 10 15
Gln Tyr Tyr Thr Gln Glu Leu Gly Val Arg Glu Arg Ser Gly His Ser
20 25 30
Val Ser Leu Ile Asp Leu Trp Gly Leu Leu Val Glu Tyr Leu Leu Tyr
35 40 45
Gln Glu Glu Asn Pro Ala Lys Leu Ser Asp Gln Gln Glu Ala Val Arg
50 55 60
Gln Gly Gln Asn Pro Tyr Pro Ile Tyr Thr Ser Val Asn Val Arg Thr
65 70 75 80
Asn Leu Ser Gly Glu Asp Phe Ala Glu Trp Cys Glu Phe Thr Pro Tyr
85 90 95
Glu Val Gly Phe Pro Lys Tyr Gly Ala Tyr Val Pro Thr Glu Leu Phe
100 105 110
Gly Ser Glu Leu Phe Met Gly Arg Leu Leu Gln Leu Gln Pro Glu Pro
115 120 125
Arg Ile Cys Tyr Leu Gln Gly Met Trp Gly Ser Ala Phe Ala Thr Ser
130 135 140
Leu Asp Glu Ile Phe Leu Lys Thr Ala Gly Ser Gly Leu Ser Phe Leu
145 150 155 160
Glu Trp Tyr Arg Gly Ser Val Asn Ile Thr Asp Asp Cys Gln Lys Pro
165 170 175
Gln Leu His Asn
180

<210> 918
<211> 281
<212>Amino acid
<213> Homo sapiens

<400> 918
 Glu Phe Leu Gly Arg Pro Thr Arg Pro Ala Lys Asp Glu Gly Asn Asp
 1 5 10 15
 Glu Gly Lys Asp Glu Gly Lys Asp Glu Gly Lys Asp Glu Gly Lys Asp
 20 25 30
 Glu Gly Lys Asp Glu Gly Lys Asp Glu Arg Lys Asp Glu Gly Lys Asp
 35 40 45
 Glu Gly Lys Asp Glu Arg Lys Asp Glu Gly Lys Asp Glu Gly Lys Asp
 50 55 60
 Glu Gly Lys Asp Glu Gly Lys Asp Glu Gly Lys Asp Glu Gly Lys Asp
 65 70 75 80
 Glu Gly Lys Asp Glu Gly Asn Asp Glu Gly Lys Asp Glu Gly Lys Asp
 85 90 95
 Glu Gly Lys Asp Glu Gly Lys Asp Glu Gly Lys Asp Glu Gly Lys Asp
 100 105 110
 Glu Arg Lys Asp Glu Gly Lys Asp Glu Gly Lys Asp Glu Arg Lys Asp
 115 120 125
 Glu Gly Lys Asp Glu Gly Lys Asp Glu Gly Lys Asp Glu Gly Lys Asp
 130 135 140
 Glu Gly Lys Asp Glu Gly Lys Asp Glu Gly Lys Asp Glu Gly Asn Asp
 145 150 155 160
 Glu Gly Lys Asp Glu Gly Lys Asp Glu Gly Lys Asp Glu Gly Lys Asp
 165 170 175
 Glu Gly Lys Asp Glu Gly Lys Asp Glu Gly Asn Asp Glu Gly Asn Asp
 180 185 190
 Glu Gly Asn Asp Glu Gly Lys Asp Glu Gly Lys Asp Glu Arg Asn Asp
 195 200 205
 Glu Gly Lys Asp Glu Gly Lys Asp Glu Gly Lys Asp Glu Gly Lys Asp
 210 215 220
 Glu Arg Asn Asp Glu Gly Lys Asp Glu Arg Lys Asp Glu Gly Lys Asp
 225 230 235 240
 Glu Gly Lys Asp Glu Gly Lys Asp Glu Gly Lys Asp Glu Gly Lys Asp
 245 250 255
 Glu Gly Asn Asp Glu Gly Lys Asp Glu Arg Lys Asp Glu Gly Lys Asp
 260 265 270
 Glu Gly Lys Asp Glu Gly Lys Asp Lys
 275 280 281

<210> 919
<211> 147
<212> Amino acid
<213> Homo sapiens

<400> 919
 Pro Ser Leu Arg Pro Ala Trp His Glu Gly Glu Asp Phe Ser Tyr Gly
 1 5 10 15
 Leu Gln Pro Tyr Cys Gly Tyr Ser Phe Gln Val Val Gly Glu Met Ile
 20 25 30
 Arg Asn Arg Glu Val Leu Pro Cys Pro Asp Asp Cys Pro Ala Trp Ala
 35 40 45
 Tyr Ala Leu Met Ile Glu Gly Trp Asn Glu Phe Pro Ser Arg Arg Ala
 50 55 60
 Arg Phe Lys Asp Ile His Ser Arg Leu Arg Ala Trp Gly Asn Leu Ser
 65 70 75 80
 Asn Tyr Asn Ser Ser Glu Gln Thr Ser Gly Gly Arg Asn Thr Thr Gln
 85 90 95
 Thr Ser Ser Leu Ser Thr Ser Pro Leu Cys Asn Val Ser Asn Ala Pro
 100 105 110
 Tyr Val Gly Pro Lys Gln Lys Val Pro Pro Phe Pro Gln Thr Gln Val

| | | |
|---|-----|-----|
| 115 | 120 | 125 |
| Ile Pro Met Lys Gly Gln Ile Arg Pro Met Val Pro Pro Pro Gln Leu | | |
| 130 | 135 | 140 |
| Tyr Val Pro | | |
| 145 | 147 | |

<210> 920
<211> 150
<212>Amino acid
<213> Homo sapiens

| | | |
|---|-----|-----|
| <400> 920 | | |
| Arg Asn Ser Gly Arg His Pro Arg Val Arg Trp Ile Leu Glu Glu Arg | | |
| 1 | 5 | 10 |
| Lys Arg Val Met Gln Glu Ala Cys Ala Lys Tyr Arg Ala Ser Ser Ser | | 15 |
| 20 | 25 | 30 |
| Arg Arg Ala Val Thr Pro Arg His Val Ser Arg Ile Phe Val Glu Asp | | |
| 35 | 40 | 45 |
| Arg His Arg Val Leu Tyr Cys Glu Val Pro Lys Ala Gly Cys Ser Asn | | |
| 50 | 55 | 60 |
| Trp Lys Arg Val Leu Met Val Leu Ala Gly Leu Ala Ser Ser Thr Ala | | |
| 65 | 70 | 75 |
| Asp Ile Gln His Asn Thr Val His Tyr Gly Ser Ala Leu Lys Arg Leu | | 80 |
| 85 | 90 | 95 |
| Asp Thr Phe Asp Arg Gln Gly Ile Leu His Arg Leu Ser Thr Tyr Thr | | |
| 100 | 105 | 110 |
| Lys Met Leu Phe Val Arg Glu Pro Phe Glu Arg Leu Val Ser Ala Phe | | |
| 115 | 120 | 125 |
| Arg Asp Lys Phe Glu His Pro Asn Ser Tyr Tyr His Pro Val Phe Cys | | |
| 130 | 135 | 140 |
| Met Ala Ile Leu Ala Arg | | |
| 145 | 150 | |

<210> 921
<211> 125
<212>Amino acid
<213> Homo sapiens

| | | |
|--|-----|-----|
| <400> 921 | | |
| Ille Met Tyr Ser Ile Ser Pro Ala Asn Ser Glu Glu Gly Gln Glu Leu | | |
| 1 | 5 | 10 |
| Tyr Val Cys Thr Val Lys Asp Asp Val Asn Leu Asp Thr Val Leu Leu | | 15 |
| 20 | 25 | 30 |
| Leu Pro Phe Leu Lys Glu Ile Ala Val Ser Gln Leu Asp Gln Leu Ser | | |
| 35 | 40 | 45 |
| Pro Glu Glu Gln Leu Leu Val Lys Cys Ala Ala Ile Ile Gly His Ser | | |
| 50 | 55 | 60 |
| Phe His Ile Asp Leu Leu Gln His Leu Leu Pro Gly Trp Asp Lys Asn | | |
| 65 | 70 | 75 |
| Lys Leu Leu Gln Val Leu Arg Ala Leu Asp Ile His Val Leu Cys | | 80 |
| 85 | 90 | 95 |
| Trp Ser Asp Lys Ser Gln Glu Leu Pro Ala Glu Pro Ile Leu Met Pro | | |
| 100 | 105 | 110 |
| Ser Ser Ile Asp Ile Ile Asp Gly Thr Lys Glu Lys Lys | | |

115

120

125

<210> 922
<211> 111
<212>Amino acid
<213> Homo sapiens

<400> 922
Gly Pro His Val Val Leu Val Leu Arg Arg Cys Phe Leu Leu Ser Tyr
1 5 10 15
Phe Lys Gly Val Glu Lys Ala Lys Ala Met Pro Ser Pro Arg Ile Leu
20 25 30
Lys Thr His Leu Ser Thr Gln Leu Leu Pro Pro Ser Phe Trp Glu Asn
35 40 45
Asn Cys Lys Val Arg Tyr Gln Gln Leu Pro Val Thr Glu Gly Lys Val
50 55 60
Ser Gln Pro Lys Arg Val Leu Gln Thr Pro Thr Gln Ser Ile Arg Asp
65 70 75 80
His Leu Cys Leu Ser Thr Val Ser Asp Ala Tyr Gln Gln Arg Glu Asn
85 90 95
Ile Lys Phe Tyr Ile Gln Gln Asp Ile His Leu Asn Ser Phe Lys
100 105 110 111

<210> 923
<211> 69
<212>Amino acid
<213> Homo sapiens

<400> 923
Phe Tyr Tyr Ile Cys Arg Leu Ser Lys Glu Asp Lys Ala Phe Leu Trp
1 5 10 15
Glu Lys Arg Tyr Tyr Cys Phe Lys His Pro Asn Cys Leu Pro Lys Ile
20 25 30
Leu Ala Ser Ala Pro Asn Trp Lys Trp Val Asn Leu Ala Lys Thr Tyr
35 40 45
Ser Leu Leu His Gln Trp Pro Ala Leu Tyr Pro Leu Ile Ala Leu Glu
50 55 60
Leu Leu Asp Ser Lys
65 69

<210> 924
<211> 120
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(120)
<223> X = any amino acid or stop code

<400> 924
 Lys Met Met Ile Xaa Gly Leu Phe Glu Ile Gln Gln Cys Pro Ile Gly
 1 5 10 15
 Lys His Cys Asn Phe Leu Gln Val Leu Arg Asn Pro Asn Arg Asp Leu
 20 25 30
 Trp Leu Val Ser Ser Phe Gly Lys Ser Ser Lys Gly Arg Glu Arg Met
 35 40 45
 Gly His His Asp Glu Tyr Tyr Arg Leu Arg Gly Arg His Asn Pro Ser
 50 55 60
 Pro Asp His Ser Tyr Lys Arg Asn Gly Glu Ser Glu Arg Lys Arg Lys
 65 70 75 80
 Lys Ser His Xaa His Met Ser Lys Ser Gln Glu Arg His Asn Ser Pro
 85 90 95
 Ser Arg Gly Arg Asn Ser Asp Arg Ser Gly Gly Arg Cys Ser Arg Ser
 100 105 110
 Asp Asn Gly Arg Ser Arg Tyr Arg
 115 120

<210> 925
<211> 108
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(108)
<223> X = any amino acid or stop code

<400> 925
 Pro Leu Ser Leu Phe Ala Arg Val Ala Gly Ser Arg Val Glu Met Pro
 1 5 10 15
 Glu Pro Pro Gly Leu Gly Asp Glu Gly Arg Pro Leu Leu His Pro Gly
 20 25 30
 Arg Arg Glu Ala Val Gly Ser Trp Val Ser Ala Phe Ala Gly Asp Ser
 35 40 45
 Thr Pro Cys Gly Pro Gly Asp Leu Ser Val Pro Arg Arg Glu Pro Phe
 50 55 60
 Arg Leu Thr Ala Leu Xaa Pro His Arg Ser Pro Val Val Arg Thr Ser
 65 70 75 80
 Leu Ile Gly Leu Leu Leu Gly Phe Ser Val Lys Glu Glu Leu Arg Gly
 85 90 95
 Val Gly Trp Ala Ala Arg Thr Pro Leu Gly Ile Arg
 100 105 108

<210> 926
<211> 305
<212>Amino acid
<213> Homo sapiens

<400> 926
 Phe Asp Lys Arg Gln His Glu Ala Arg Ile Gln Gln Met Glu Asn Glu
 1 5 10 15
 Ile His Tyr Leu Gln Glu Asn Leu Lys Ser Met Glu Glu Ile Gln Gly

| | | |
|---|-----|-----|
| 20 | 25 | 30 |
| Leu Thr Asp Leu Gln Leu Gln Glu Ala Asp Glu Glu Lys Glu Arg Ile | | |
| 35 | 40 | 45 |
| Leu Ala Gln Leu Arg Glu Leu Glu Lys Lys Lys Leu Glu Asp Ala | | |
| 50 | 55 | 60 |
| Lys Ser Gln Glu Gln Val Phe Gly Leu Asp Lys Glu Leu Lys Lys Leu | | |
| 65 | 70 | 75 |
| Lys Lys Ala Val Ala Thr Ser Asp Lys Leu Ala Thr Ala Glu Leu Thr | | |
| 85 | 90 | 95 |
| Ile Ala Lys Asp Gln Leu Lys Ser Leu His Gly Thr Val Met Lys Ile | | |
| 100 | 105 | 110 |
| Asn Gln Glu Arg Ala Glu Glu Leu Gln Glu Ala Glu Arg Phe Ser Arg | | |
| 115 | 120 | 125 |
| Lys Ala Ala Gln Ala Ala Arg Asp Leu Thr Arg Ala Glu Ala Glu Ile | | |
| 130 | 135 | 140 |
| Glu Leu Leu Gln Asn Leu Leu Arg Gln Lys Gly Glu Gln Phe Arg Leu | | |
| 145 | 150 | 155 |
| Glu Met Glu Lys Thr Gly Val Gly Thr Gly Ala Asn Ser Gln Val Leu | | |
| 165 | 170 | 175 |
| Glu Ile Glu Lys Leu Asn Glu Thr Met Glu Arg Gln Arg Thr Glu Ile | | |
| 180 | 185 | 190 |
| Ala Arg Leu Gln Asn Val Leu Tyr Leu Thr Gly Ser Asp Asn Lys Gly | | |
| 195 | 200 | 205 |
| Gly Phe Glu Asn Val Leu Glu Glu Ile Ala Glu Leu Arg Arg Glu Gly | | |
| 210 | 215 | 220 |
| Ser Tyr Gln Asn Asp Tyr Ile Ser Ser Met Ala Asp Pro Phe Lys Arg | | |
| 225 | 230 | 235 |
| Arg Gly Tyr Trp Tyr Phe Met Pro Pro Pro Ser Ser Lys Val Ser | | |
| 245 | 250 | 255 |
| Ser His Ser Ser Gln Ala Thr Lys Asp Ser Gly Val Gly Leu Lys Tyr | | |
| 260 | 265 | 270 |
| Ser Ala Ser Thr Pro Val Arg Lys Pro Arg Pro Gly Gln Gln Asp Gly | | |
| 275 | 280 | 285 |
| Lys Glu Gly Ser Gln Pro Pro Ala Ser Gly Tyr Trp Val Val Tyr Ser | | |
| 290 | 295 | 300 |
| Pro | | |
| 305 | | |

<210> 927
 <211> 303
 <212>Amino acid
 <213> Homo sapiens

| | | | |
|---|-----|-----|----|
| <400> 927 | | | |
| Ser Asp Ala Ser Ser Phe Lys Thr Arg Val Ile Val Val Pro Arg Pro | | | |
| 1 | 5 | 10 | 15 |
| Arg Val Phe Pro Leu Gly Ser Ala Ile Thr Glu Asn Ser Leu Glu Ser | | | |
| 20 | 25 | 30 | |
| Asp Ser Gln Ile Gly Gln Phe Gly Val Gly Phe Tyr Ser Ala Phe Leu | | | |
| 35 | 40 | 45 | |
| Val Ala Asp Lys Val Ile Val Thr Ser Lys His Asn Asn Asp Thr Gln | | | |
| 50 | 55 | 60 | |
| His Ile Trp Glu Ser Asp Ser Asn Glu Phe Ser Val Ile Ala Asp Pro | | | |
| 65 | 70 | 75 | 80 |
| Arg Gly Asn Thr Leu Gly Arg Gly Thr Ile Thr Leu Val Leu Lys | | | |
| 85 | 90 | 95 | |
| Glu Glu Ala Ser Asp Tyr Leu Glu Leu Asp Thr Ile Lys Asn Leu Val | | | |
| 100 | 105 | 110 | |
| Lys Lys Tyr Ser Gln Phe Ile Asn Phe Pro Ile Tyr Val Trp Ser Ser | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | 115 | 120 | 125 | | | | | | | | | | | | |
| Thr | Glu | Thr | Val | Glu | Glu | Pro | Met | Glu | Glu | Glu | Glu | Ala | Ala | Lys | |
| | 130 | 135 | 140 | | | | | | | | | | | | |
| Glu | Glu | Lys | Glu | Glu | Ser | Asp | Asp | Glu | Ala | Ala | Val | Glu | Glu | Glu | |
| | 145 | 150 | 155 | 160 | | | | | | | | | | | |
| Glu | Glu | Lys | Pro | Lys | Thr | Lys | Lys | Val | Glu | Lys | Thr | Val | Trp | Asp | |
| | 165 | 170 | 175 | | | | | | | | | | | | |
| Trp | Glu | Leu | Met | Asn | Asp | Ile | Lys | Pro | Ile | Trp | Gln | Arg | Pro | Ser | Lys |
| | 180 | 185 | 190 | | | | | | | | | | | | |
| Glu | Val | Glu | Glu | Asp | Glu | Tyr | Lys | Ala | Phe | Tyr | Lys | Ser | Phe | Ser | Lys |
| | 195 | 200 | 205 | | | | | | | | | | | | |
| Glu | Ser | Asp | Asp | Pro | Met | Ala | Tyr | Ile | His | Phe | Thr | Ala | Glu | Gly | Glu |
| | 210 | 215 | 220 | | | | | | | | | | | | |
| Val | Thr | Phe | Lys | Ser | Ile | Leu | Phe | Val | Pro | Thr | Ser | Ala | Pro | Arg | Gly |
| | 225 | 230 | 235 | 240 | | | | | | | | | | | |
| Leu | Phe | Asp | Glu | Tyr | Gly | Ser | Lys | Lys | Ser | Asp | Tyr | Ile | Lys | Leu | Tyr |
| | 245 | 250 | 255 | | | | | | | | | | | | |
| Val | Arg | Arg | Val | Phe | Ile | Thr | Asp | Asp | Phe | His | Asp | Met | Met | Pro | Lys |
| | 260 | 265 | 270 | | | | | | | | | | | | |
| Tyr | Leu | Asn | Phe | Val | Lys | Gly | Val | Val | Asp | Ser | Asp | Asp | Leu | Pro | Leu |
| | 275 | 280 | 285 | | | | | | | | | | | | |
| Asn | Val | Val | Ser | Arg | Glu | Thr | Leu | Gln | Gln | His | Lys | Leu | Leu | Lys | Val |
| | 290 | 295 | 300 | 303 | | | | | | | | | | | |

<210> 928
 <211> 147
 <212>Amino acid
 <213> Homo sapiens

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Cys | Gly | Ser | Trp | Met | Arg | Arg | Ala | Leu | Ile | Pro | Pro | Cys | Arg | Gly | Gly |
| 1 | | | | 5 | | | 10 | | | 15 | | | | | |
| Pro | Ser | Ala | Ser | Asp | Arg | Cys | Ser | Cys | Ser | Pro | Ser | Gly | Phe | Ser | |
| | | | | | | | 20 | | 25 | | | | 30 | | |
| Ala | Gly | Arg | Gly | Arg | Cys | Pro | Val | Gln | Gly | Cys | Leu | Arg | Pro | His | Arg |
| | | | | | | | 35 | | 40 | | | | 45 | | |
| Val | Gln | Leu | Leu | Arg | Arg | Trp | Gly | Pro | Gly | Ser | Pro | Ala | Gly | Gln | Arg |
| | | | | | | | 50 | | 55 | | | | 60 | | |
| Leu | Ser | Lys | Gly | Phe | Gln | Leu | Leu | Arg | Trp | Trp | Gly | Pro | Gly | Ser | Pro |
| | | | | | | | 65 | | 70 | | 75 | | 80 | | |
| Ala | Pro | Glu | Pro | Arg | Lys | Gly | Pro | Phe | Pro | Pro | Pro | Asp | Pro | Pro | Trp |
| | | | | | | | 85 | | 90 | | 95 | | | | |
| Pro | Val | Thr | Ala | Val | Thr | Val | Met | Ala | Gly | Ser | Val | Pro | Ser | Ala | Gln |
| | | | | | | | 100 | | 105 | | 110 | | | | |
| Ser | Val | Asp | Ala | Leu | Glu | Ser | Pro | Gly | Pro | Leu | Ala | Leu | Glu | Gly | Pro |
| | | | | | | | 115 | | 120 | | 125 | | | | |
| Ser | Ser | Pro | Arg | Asn | Leu | Leu | Trp | Arg | Glu | Met | Ser | Ile | Phe | Leu | Pro |
| | | | | | | | 130 | | 135 | | 140 | | | | |
| Gly | Ile | Phe | | | | | 145 | | 147 | | | | | | |

<210> 929
 <211> 183
 <212>Amino acid
 <213> Homo sapiens

<400> 929
 Pro Gly Pro Thr Pro Pro Pro Arg His Gly Ser Pro Pro His Arg Leu
 1 5 10 15
 Ile Arg Val Glu Thr Pro Pro Gly Pro Ala Pro Pro Ala Asp Glu Arg
 20 25 30
 Ile Ser Gly Pro Pro Ala Ser Ser Asp Arg Leu Ala Ile Leu Glu Asp
 35 40 45
 Tyr Ala Asp Pro Phe Asp Val Gln Glu Thr Gly Glu Gly Ser Ala Gly
 50 55 60
 Ala Ser Gly Ala Pro Glu Lys Val Pro Glu Asn Asp Gly Tyr Met Glu
 65 70 75 80
 Pro Tyr Glu Ala Gln Lys Met Met Ala Glu Ile Arg Gly Ser Lys Glu
 85 90 95
 Thr Ala Thr Gln Pro Leu Pro Leu Tyr Asp Thr Pro Tyr Glu Pro Glu
 100 105 110
 Glu Asp Gly Ala Thr Pro Glu Gly Glu Gly Ala Pro Trp Pro Arg Glu
 115 120 125
 Ser Arg Leu Pro Glu Asp Asp Glu Arg Pro Pro Glu Glu Tyr Asp Gln
 130 135 140
 Pro Trp Glu Trp Lys Lys Glu Arg Ile Ser Lys Ala Phe Ala Val Asp
 145 150 155 160
 Ile Lys Val Ile Lys Asp Leu Pro Trp Pro Pro Pro Val Gly Gln Leu
 165 170 175
 Asp Ser Ser Pro Ser Leu Pro
 180 183

<210> 930
<211> 187
<212>Amino acid
<213> Homo sapiens

<400> 930
 Gln Phe Phe Ser Leu Phe Leu Arg Tyr Gln Ile His Thr Gly Leu Gln
 1 5 10 15
 His Ser Ile Ile Arg Pro Thr Gln Pro Asn Cys Leu Pro Leu Asp Asn
 20 25 30
 Ala Thr Leu Pro Gln Lys Leu Lys Glu Val Gly Tyr Ser Thr His Met
 35 40 45
 Val Gly Lys Trp His Leu Gly Phe Tyr Arg Lys Glu Cys Met Pro Thr
 50 55 60
 Arg Arg Gly Phe Asp Thr Phe Phe Gly Ser Leu Leu Gly Ser Gly Asp
 65 70 75 80
 Tyr Tyr Thr His Tyr Lys Cys Asp Ser Pro Gly Met Cys Gly Tyr Asp
 85 90 95
 Leu Tyr Glu Asn Asp Asn Ala Ala Trp Asp Tyr Asp Asn Gly Ile Tyr
 100 105 110
 Ser Thr Gln Met Tyr Thr Gln Arg Val Gln Ile Leu Ala Ser His
 115 120 125
 Asn Pro Thr Lys Pro Ile Phe Leu Tyr Ile Ala Tyr Gln Ala Val His
 130 135 140
 Ser Pro Leu Gln Ala Pro Gly Arg Tyr Phe Glu His Tyr Arg Ser Ile
 145 150 155 160
 Ile Asn Ile Asn Arg Arg Arg Tyr Ala Ala Met Leu Ser Cys Leu Asp
 165 170 175
 Glu Ala Ile Asn Asn Val Thr Leu Ala Leu Lys
 180 185 187

<210> 931
<211> 192
<212>Amino acid
<213> Homo sapiens

<400> 931
Arg Val Arg Lys Gly Arg Gly Gly Glu Arg Leu Gln Ser Pro Leu Arg
1 5 10 15
Val Pro Gln Lys Pro Glu Arg Pro Pro Leu Pro Pro Lys Pro Gln Phe
20 25 30
Leu Asn Ser Gly Ala Tyr Pro Gln Lys Pro Leu Arg Asn Gln Gly Val
35 40 45
Val Arg Thr Leu Ser Ser Ser Ala Gln Glu Asp Ile Ile Arg Trp Phe
50 55 60
Lys Glu Glu Gln Leu Pro Leu Arg Ala Gly Tyr Gln Lys Thr Ser Asp
65 70 75 80
Thr Ile Ala Pro Trp Phe His Gly Ile Leu Thr Leu Lys Lys Ala Asn
85 90 95
Glu Leu Leu Leu Ser Thr Gly Met Pro Gly Ser Phe Leu Ile Arg Val
100 105 110
Ser Glu Arg Ile Lys Gly Tyr Ala Leu Ser Tyr Leu Ser Glu Asp Gly
115 120 125
Cys Lys His Phe Leu Ile Asp Ala Ser Ala Asp Ala Tyr Ser Phe Leu
130 135 140
Gly Val Asp Gln Leu Gln His Ala Thr Leu Ala Asp Leu Val Glu Tyr
145 150 155 160
His Lys Glu Glu Pro Ile Thr Ser Leu Gly Lys Glu Leu Leu Leu Tyr
165 170 175
Pro Cys Gly Gln Gln Asp Gln Leu Pro Asp Tyr Leu Glu Leu Phe Glu
180 185 190 192

<210> 932
<211> 545
<212>Amino acid
<213> Homo sapiens

<400> 932
Gly Ser Leu Glu Lys Ala Leu Phe Gln Leu Leu Lys Val Trp Gly Gln
1 5 10 15
Trp Ala Glu Gln Thr Arg Arg Leu Gln Arg Leu Asp Val Ser Leu Ser
20 25 30
Val Ala Arg Val Arg Ser Ala Gly Pro Ser Cys Gln Asn Lys Gly Asp
35 40 45
Leu Val Met Glu Ala Leu Leu Glu Gly Ile Gln Asn Arg Gly His Gly
50 55 60
Gly Gly Phe Leu Thr Ser Cys Glu Ala Glu Leu Gln Glu Leu Met Lys
65 70 75 80
Gln Ile Asp Ile Met Val Ala His Lys Ser Glu Trp Glu Gly Arg
85 90 95
Thr His Ala Leu Glu Thr Cys Leu Lys Ile Arg Glu Gln Glu Leu Lys
100 105 110
Ser Leu Arg Ser Glu Leu Asp Val Thr His Lys Glu Val Gly Met Leu

| | | |
|---|-----|-----|
| 115 | 120 | 125 |
| His Gln Gln Val Glu Glu His Glu Lys Ile Lys Gln Glu Met Thr Met | | |
| 130 | 135 | 140 |
| Glu Tyr Lys Gln Glu Leu Lys Lys Leu His Glu Glu Leu Cys Ile Leu | | |
| 145 | 150 | 155 |
| Lys Arg Ser Tyr Glu Lys Leu Gln Lys Lys Gln Met Arg Glu Phe Arg | | |
| 165 | 170 | 175 |
| Gly Asn Thr Lys Asn His Arg Glu Asp Arg Ser Glu Ile Glu Arg Leu | | |
| 180 | 185 | 190 |
| Thr Ala Lys Ile Glu Glu Phe Arg Gln Lys Ser Leu Asp Trp Glu Lys | | |
| 195 | 200 | 205 |
| Gln Arg Leu Ile Tyr Gln Gln Val Ser Ser Leu Glu Ala Gln Arg | | |
| 210 | 215 | 220 |
| Lys Ala Leu Ala Glu Gln Ser Glu Ile Ile Gln Ala Gln Leu Val Asn | | |
| 225 | 230 | 235 |
| Arg Lys Gln Lys Leu Glu Ser Val Glu Leu Ser Ser Gln Ser Glu Ile | | |
| 245 | 250 | 255 |
| Gln His Leu Ser Ser Lys Leu Glu Arg Ala Asn Asp Thr Ile Cys Ala | | |
| 260 | 265 | 270 |
| Asn Glu Leu Glu Ile Glu Arg Leu Thr Met Arg Val Asn Asp Leu Val | | |
| 275 | 280 | 285 |
| Gly Thr Ser Met Thr Val Leu Gln Glu Gln Gln Lys Glu Glu Lys | | |
| 290 | 295 | 300 |
| Leu Arg Glu Ser Glu Lys Leu Leu Glu Ala Leu Gln Glu Glu Lys Arg | | |
| 305 | 310 | 315 |
| Glu Leu Lys Ala Ala Leu Gln Ser Gln Glu Asn Leu Ile His Glu Ala | | |
| 325 | 330 | 335 |
| Arg Ile Gln Lys Glu Lys Leu Gln Glu Lys Val Lys Ala Thr Asn Thr | | |
| 340 | 345 | 350 |
| Gln His Ala Val Glu Ala Ile Ser Leu Glu Ser Val Ser Ala Thr Cys | | |
| 355 | 360 | 365 |
| Lys Gln Leu Ser Gln Glu Leu Met Glu Lys Tyr Glu Glu Leu Lys Arg | | |
| 370 | 375 | 380 |
| Met Glu Ala His Asn Asn Glu Tyr Lys Ala Glu Ile Lys Lys Leu Lys | | |
| 385 | 390 | 395 |
| Glu Gln Ile Leu Gln Gly Glu Gln Ser Tyr Ser Ser Ala Leu Glu Gly | | |
| 405 | 410 | 415 |
| Met Lys Met Glu Ile Ser His Leu Thr Gln Glu Leu His Gln Arg Asp | | |
| 420 | 425 | 430 |
| Ile Thr Ile Ala Ser Thr Lys Gly Ser Ser Ser Asp Met Glu Lys Arg | | |
| 435 | 440 | 445 |
| Leu Arg Ala Glu Met Gln Lys Ala Glu Asp Lys Ala Val Glu His Lys | | |
| 450 | 455 | 460 |
| Glu Ile Leu Asp Gln Leu Glu Ser Leu Lys Leu Glu Asn Arg His Leu | | |
| 465 | 470 | 475 |
| Ser Glu Met Val Met Lys Leu Glu Leu Gly Leu His Glu Cys Ser Leu | | |
| 485 | 490 | 495 |
| Pro Val Ser Pro Leu Gly Ser Ile Ala Thr Arg Phe Leu Glu Glu Glu | | |
| 500 | 505 | 510 |
| Glu Leu Arg Ser His His Ile Leu Glu Arg Leu Asp Ala His Ile Glu | | |
| 515 | 520 | 525 |
| Glu Leu Lys Arg Glu Ser Glu Lys Lys Thr Val Arg Gln Phe Thr Ala Leu | | |
| 530 | 535 | 540 |
| Lys | | |
| 545 | | |

<210> 933

<211> 297

<212>Amino acid

<213> Homo sapiens

<400> 933

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Thr | Gly | Phe | Leu | Gly | Trp | Ser | Gln | Gly | Pro | Ser | Leu | Thr | Pro | Thr | Ser |
| 1 | | | | 5 | | | | 10 | | | | 15 | | | |
| Leu | Ser | Ala | Leu | Tyr | Pro | Ser | Gln | Val | Glu | Thr | Gly | Val | Val | Leu | |
| | | | 20 | | | | | 25 | | | | 30 | | | |
| Ser | Leu | Gln | Gly | Thr | Glu | Gln | His | Ser | Arg | Arg | Pro | Ile | Gln | Arg | Gly |
| | | 35 | | | | | 40 | | | | 45 | | | | |
| Ala | Pro | Ser | Gln | Lys | Asp | Thr | Pro | Asn | Pro | Gly | Asp | Ser | Leu | Asp | Thr |
| | | 50 | | | | | 55 | | | | 60 | | | | |
| Pro | Gly | Pro | Arg | Ile | Leu | Ala | Phe | Leu | His | Pro | Pro | Ser | Leu | Ser | Gly |
| | 65 | | | | 70 | | | | 75 | | | 80 | | | |
| Ala | Ala | Leu | Ala | Ala | Asp | Pro | Arg | Arg | Phe | Cys | Ser | Pro | Asp | Leu | Arg |
| | | 85 | | | | | | 90 | | | | 95 | | | |
| Arg | Leu | Leu | Gly | Pro | Ile | Leu | Asp | Gly | Ala | Ser | Val | Ala | Ala | Thr | Pro |
| | | 100 | | | | | | 105 | | | | 110 | | | |
| Ser | Thr | Pro | Leu | Ala | Thr | Arg | His | Pro | Gln | Ser | Pro | Leu | Ser | Ala | Asp |
| | | 115 | | | | | 120 | | | | 125 | | | | |
| Leu | Pro | Asp | Glu | Leu | Pro | Val | Gly | Thr | Glu | Asn | Val | His | Arg | Leu | Phe |
| | 130 | | | | | 135 | | | | 140 | | | | | |
| Thr | Ser | Gly | Lys | Asp | Thr | Glu | Ala | Val | Glu | Thr | Asp | Leu | Asp | Ile | Ala |
| | 145 | | | | | 150 | | | | 155 | | | 160 | | |
| Gln | Asp | Ala | Asp | Ala | Leu | Asp | Leu | Glu | Met | Leu | Ala | Pro | Tyr | Ile | Ser |
| | | 165 | | | | | 170 | | | | 175 | | | | |
| Met | Asp | Asp | Asp | Phe | Gln | Leu | Asn | Ala | Ser | Glu | Gln | Leu | Pro | Arg | Ala |
| | 180 | | | | | 185 | | | | 190 | | | | | |
| Tyr | His | Arg | Pro | Leu | Gly | Ala | Val | Pro | Arg | Pro | Arg | Ala | Arg | Ser | Phe |
| | 195 | | | | | 200 | | | 205 | | | | | | |
| His | Gly | Leu | Ser | Pro | Pro | Ala | Leu | Glu | Pro | Ser | Leu | Leu | Pro | Arg | Trp |
| | 210 | | | | | 215 | | | | 220 | | | | | |
| Gly | Ser | Asp | Pro | Arg | Leu | Ser | Cys | Ser | Ser | Pro | Ser | Arg | Gly | Asp | Pro |
| | 225 | | | | | 230 | | | | 235 | | | 240 | | |
| Ser | Ala | Ser | Ser | Pro | Met | Ala | Gly | Ala | Arg | Lys | Arg | Thr | Leu | Ala | Gln |
| | | 245 | | | | | 250 | | | | 255 | | | | |
| Ser | Ser | Lys | Asp | Glu | Asp | Glu | Gly | Val | Glu | Leu | Leu | Gly | Val | Arg | Pro |
| | 260 | | | | | 265 | | | | 270 | | | | | |
| Pro | Lys | Arg | Ser | Pro | Ser | Pro | Glu | His | Glu | Asn | Phe | Leu | Leu | Phe | Pro |
| | 275 | | | | | 280 | | | | 285 | | | | | |
| Leu | Ser | Leu | Ser | Phe | Leu | Leu | Thr | Gly | | | | | | | |
| | 290 | | | | | 295 | | 297 | | | | | | | |

<210> 934

<211> 140

<212>Amino acid

<213> Homo sapiens

<400> 934

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Glu | Leu | Gln | Asp | Cys | Phe | Asp | Val | His | Asp | Ala | Ser | Trp | Glu | Glu | Gln |
| 1 | | | | 5 | | | | 10 | | | | 15 | | | |
| Ile | Phe | Trp | Gly | Trp | His | Asn | Asp | Val | His | Ile | Phe | Asp | Thr | Lys | Thr |
| | 20 | | | | 25 | | | | 30 | | | | | | |
| Gln | Thr | Trp | Phe | Gln | Pro | Glu | Ile | Lys | Gly | Gly | Val | Pro | Pro | Gln | Pro |
| | 35 | | | | 40 | | | | 45 | | | | | | |
| Arg | Ala | Ala | His | Thr | Cys | Ala | Val | Leu | Gly | Asn | Lys | Gly | Tyr | Ile | Phe |
| | 50 | | | | 55 | | | | 60 | | | | | | |
| Gly | Gly | Arg | Val | Leu | Gln | Thr | Arg | Met | Asn | Asp | Leu | His | Tyr | Leu | Asn |
| | 65 | | | | 70 | | | | 75 | | | 80 | | | |
| Leu | Asp | Asp | Thr | Trp | Trp | Ser | Gly | Arg | Ile | Thr | Ile | Asn | Gly | Gl | Ser |

| | |
|---|-----|
| Pro Lys His Arg Ser Trp His Thr Leu Thr Pro Ile Ala Asp Asp Lys | 95 |
| 100 | 105 |
| Leu Phe Leu Cys Gly Gly Leu Asn Ala Tyr Asn Met Pro Leu Ser Asp | 110 |
| 115 | 120 |
| Gly Trp Ile His Asn Val Thr Thr His Cys Trp Lys | 125 |
| 130 | 135 |
| | 140 |

<210> 935
<211> 97
<212>Amino acid
<213> Homo sapiens

| | | |
|---|----|----|
| <400> 935 | | |
| Phe Phe Phe Leu Arg Thr Arg Ser His Ser Val Thr Pro Arg Trp Glu | | |
| 1 | 5 | 10 |
| Cys Ser Asp Asp Ile Thr Ala His Trp Gln Pro Gln Pro Trp Gly Ser | | 15 |
| 20 | 25 | 30 |
| Ser Asp Pro Leu Thr Phe Ser Arg Pro Gln Val Val Val Pro Pro Arg | | |
| 35 | 40 | 45 |
| His Thr Thr Leu Cys Pro Ala Asn Phe Phe Val Phe Cys Ile Phe Cys | | |
| 50 | 55 | 60 |
| Arg Asn Arg Ile Ser Pro Cys Trp Pro Gly Trp Ser Arg Thr Pro Trp | | |
| 65 | 70 | 75 |
| Ala Gln Leu Ile Arg Leu Pro Arg Pro Pro Lys Val Leu Gly Leu Gln | | 80 |
| 85 | 90 | 95 |
| Val | | |
| 97 | | |

<210> 936
<211> 245
<212>Amino acid
<213> Homo sapiens

| | | |
|---|-----|-----|
| <400> 936 | | |
| Pro Arg Glu Gly Gln Val Lys Gln Gly Leu Leu Gly Asp Cys Trp Phe | | |
| 1 | 5 | 10 |
| Leu Cys Ala Cys Ala Ala Leu Gln Lys Ser Arg His Leu Leu Asp Gln | | 15 |
| 20 | 25 | 30 |
| Val Ile Pro Pro Gly Gln Pro Ser Trp Ala Asp Gln Glu Tyr Arg Gly | | |
| 35 | 40 | 45 |
| Ser Phe Thr Cys Arg Ile Trp Gln Phe Gly Arg Trp Val Glu Val Thr | | |
| 50 | 55 | 60 |
| Thr Asp Asp Arg Leu Pro Cys Leu Ala Gly Arg Leu Cys Phe Ser Arg | | |
| 65 | 70 | 75 |
| Cys Gln Arg Glu Asp Val Phe Trp Leu Pro Leu Leu Glu Lys Val Tyr | | 80 |
| 85 | 90 | 95 |
| Ala Lys Val His Gly Ser Tyr Glu His Leu Trp Ala Gly Gln Val Ala | | |
| 100 | 105 | 110 |
| Asp Ala Leu Val Asp Leu Thr Gly Gly Leu Ala Glu Arg Trp Asn Leu | | |
| 115 | 120 | 125 |
| Lys Gly Val Ala Gly Ser Gly Gly Gln Gln Asp Arg Pro Gly Arg Trp | | |
| 130 | 135 | 140 |
| Glu His Arg Thr Cys Arg Gln Leu Leu His Leu Lys Asp Gln Cys Leu | | |

| | | | |
|---|-----|-----|-----|
| 145 | 150 | 155 | 160 |
| Ile Ser Cys Cys Val Leu Ser Pro Arg Ala Gly Glu Ala Arg Gly Gln | | | |
| 165 | 170 | 175 | |
| His Gly Arg Ala Ala Ala Ser Val Pro Pro Thr Ala Arg Pro Gln Ala | | | |
| 180 | 185 | 190 | |
| His Cys Ser Phe Leu Cys Asp Trp Leu His Ser Pro Val Arg Thr Lys | | | |
| 195 | 200 | 205 | |
| Trp Glu Glu Val Ser Leu Phe Ser Arg Val Val Ser Ser Val Cys Asp | | | |
| 210 | 215 | 220 | |
| Leu Pro Ieu Leu Ser Ser Arg Gly Thr Trp Pro Phe Ser Pro Leu | | | |
| 225 | 230 | 235 | 240 |
| Thr Ser Pro Phe His | | | |
| 245 | | | |

<210> 937
<211> 211
<212>Amino acid
<213> Homo sapiens

| | | | |
|---|-----|-----|-----|
| <400> 937 | | | |
| Ala Glu Cys Leu Glu Ala Ser Ile Ala Arg Tyr Ala His Arg Val Ala | 1 | 5 | 10 |
| | | | 15 |
| Asn Ser Arg Tyr Thr Phe Asp Gly Glu Thr Val Thr Leu Ser Pro Ser | 20 | 25 | 30 |
| | | | |
| Gln Gly Val Asn Gln Leu His Gly Gly Pro Glu Gly Phe Asp Lys Arg | 35 | 40 | 45 |
| | | | |
| Arg Trp Gln Ile Val Asn Gln Asn Asp Arg Gln Val Leu Phe Ala Leu | 50 | 55 | 60 |
| | | | |
| Ser Ser Asp Asp Gly Asp Gln Gly Phe Pro Gly Asn Leu Gly Ala Thr | 65 | 70 | 75 |
| | | | 80 |
| Val Gln Tyr Arg Leu Thr Asp Asp Asn Arg Ile Ser Ile Thr Tyr Arg | 85 | 90 | 95 |
| | | | |
| Ala Thr Val Asp Lys Pro Cys Pro Val Asn Met Thr Asn His Val Tyr | 100 | 105 | 110 |
| | | | |
| Phe Asn Leu Asp Gly Glu Gln Ser Asp Val Arg Asn His Lys Leu Gln | 115 | 120 | 125 |
| | | | |
| Ile Leu Ala Asp Glu Tyr Leu Pro Val Asp Glu Gly Gly Ile Pro His | 130 | 135 | 140 |
| | | | |
| Asp Gly Leu Lys Ser Val Ala Gly Thr Ser Phe Asp Phe Arg Ser Ala | 145 | 150 | 155 |
| | | | 160 |
| Lys Ile Ile Ala Ser Glu Phe Leu Ala Asp Asp Asp Gln Arg Lys Val | 165 | 170 | 175 |
| | | | |
| Lys Gly Tyr Asp His Ala Phe Leu Leu Gln Ala Lys Gly Asp Gly Lys | 180 | 185 | 190 |
| | | | |
| Lys Val Ala Ala His Val Trp Ser Ala Asp Glu Lys Leu Gln Leu Lys | 195 | 200 | 205 |
| | | | |
| Val Tyr Thr | 210 | 211 | |

<210> 938
<211> 118
<212>Amino acid
<213> Homo sapiens

<400> 938
 Pro Leu Ser Arg Phe Leu Ser Lys Glu Ser Gln Glu Asp Trp Gly Met
 1 5 10 15
 Glu Arg Gln Ser Arg Val Met Ser Glu Lys Asp Glu Tyr Gln Phe Gln
 20 25 30
 His Gln Gly Ala Val Glu Leu Leu Val Phe Asn Phe Leu Leu Ile Leu
 35 40 45
 Thr Ile Leu Thr Ile Trp Leu Phe Lys Asn His Arg Phe Arg Phe Leu
 50 55 60
 His Glu Thr Gly Gly Ala Met Val Tyr Asp Lys Pro Pro Lys Phe Ala
 65 70 75 80
 Met Ser Arg Glu Gln Met Ser Gln Ser Cys Ser His Thr Ala His Asn
 85 90 95
 Ala Ser Leu Leu Thr Asp Ala Gly Pro Leu Ser Cys Gly Glu Ser Arg
 100 105 110
 Ala Ser Cys Leu Phe Leu
 115 118

<210> 939
 <211> 143
 <212>Amino acid
 <213> Homo sapiens

<400> 939
 Asp Ser Lys Glu Pro Arg Leu Gln Gln Leu Gly Leu Leu Glu Glu
 1 5 10 15
 Gln Leu Arg Gly Leu Gly Phe Arg Gln Thr Arg Gly Tyr Lys Ser Leu
 20 25 30
 Ala Gly Cys Leu Gly His Gly Pro Leu Val Leu Gln Leu Leu Ser Phe
 35 40 45
 Thr Leu Leu Ala Gly Leu Leu Val Gln Val Ser Lys Val Pro Ser Ser
 50 55 60
 Ile Ser Gln Glu Gln Ser Arg Gln Asp Ala Ile Tyr Gln Asn Leu Thr
 65 70 75 80
 Gln Leu Lys Ala Ala Val Gly Glu Leu Ser Glu Lys Ser Lys Leu Gln
 85 90 95
 Glu Ile Tyr Gln Glu Leu Thr Gln Leu Lys Ala Ala Val Gly Glu Leu
 100 105 110
 Pro Glu Lys Ser Lys Leu Gln Glu Ile Tyr Gln Glu Leu Thr Trp Leu
 115 120 125
 Lys Ala Ala Val Gly Glu Leu Pro Glu Lys Ser Lys Met Gln Glu
 130 135 140 143

<210> 940
 <211> 63
 <212>Amino acid
 <213> Homo sapiens

<400> 940
 Met Gln Ser Ile Ala Trp Gly His Arg Arg Asp Arg Gly Glu Ser Pro
 1 5 10 15
 Leu Gly Trp Gly Gln Glu Ser Glu Ala Ser Pro Ser Ala Leu Thr Glu
 20 25 30
 Ala Pro Lys Ala Ala His Thr Thr Arg Leu Gly Phe Leu Ala Ala Asn

| | | |
|---|----|------------|
| 35 | 40 | 45 |
| Asn Pro Asn Gly His Ser Gln Pro Gln Asp Ser Phe Leu Leu * | | |
| 50 | 55 | 60 62 |

<210> 941
<211> 238
<212>Amino acid
<213> Homo sapiens

<400> 941
Phe Glu Thr Leu Ser Met Arg Gly Ile Pro His Met Leu Ala Leu Gly
1 5 10 15
Pro Gln Gln Leu Leu Ala Gln Asp Glu Glu Gly Asp Thr Leu Leu His
20 25 30
Leu Phe Ala Ala Arg Gly Leu Arg Trp Ala Ala Tyr Ala Ala Ala Glu
35 40 45
Val Leu Gln Val Tyr Arg Arg Leu Asp Ile Arg Glu His Lys Gly Lys
50 55 60
Thr Pro Leu Leu Val Ala Ala Ala Ala Asn Gln Pro Leu Ile Val Glu
65 70 75 80
Asp Leu Leu Asn Leu Gly Ala Glu Pro Asn Ala Ala Asp His Gln Gly
85 90 95
Arg Ser Val Leu His Val Ala Ala Thr Tyr Gly Leu Pro Gly Val Leu
100 105 110
Leu Ala Val Leu Asn Ser Gly Val Glu Val Asp Leu Glu Ala Arg Asp
115 120 125
Phe Glu Gly Leu Thr Pro Leu His Thr Ala Ile Leu Ala Leu Asn Val
130 135 140
Ala Met Arg Pro Ser Asp Leu Cys Pro Arg Val Leu Ser Thr Gln Ala
145 150 155 160
Arg Asp Arg Leu Asp Cys Val His Met Leu Leu Gln Met Gly Ala Asn
165 170 175
His Thr Ile Gln Val Ser Gly Asp Val Gly Gly Gln Thr Leu Gly Asp
180 185 190
Cys Val Glu Trp Gly His Leu Asp Val Arg Glu Leu Gln Ala Asn Ala
195 200 205
Asp Phe Ala Ser Ser Leu Leu Arg Ala Leu Glu His Val Thr Ser Leu
210 215 220
Leu Cys Ala Leu Arg Val Phe Cys Leu Phe Leu Cys Gln Leu
225 230 235 238

<210> 942
<211> 158
<212>Amino acid
<213> Homo sapiens

<400> 942
Asp Ala Trp Ala Asp Ala Trp Val Gly Thr Lys Met Ala Asp Leu Asp
1 5 10 15
Ser Pro Pro Lys Leu Ser Gly Val Gln Gln Pro Ser Glu Gly Val Gly
20 25 30
Gly Gly Arg Cys Ser Glu Ile Ser Ala Glu Leu Ile Arg Ser Leu Thr
35 40 45
Glu Leu Gln Glu Leu Glu Ala Val Tyr Glu Arg Leu Cys Gly Glu Glu

| | | |
|---|-------------------------|-----|
| 50 | 55 | 60 |
| Lys Val Val Glu Arg Glu Leu Asp Ala Leu | Leu Glu Gln Gln Asn Thr | |
| 65 | 70 | 75 |
| Ile Glu Ser Lys Met Val Thr Leu His Arg Met Gly Pro Asn Leu Gln | | 80 |
| 85 | 90 | 95 |
| Leu Ile Glu Gly Asp Ala Lys Gln Leu Ala Gly Met Ile Thr Phe Thr | | |
| 100 | 105 | 110 |
| Cys Asn Leu Ala Glu Asn Val Ser Ser Lys Val Arg Gln Leu Asp Leu | | |
| 115 | 120 | 125 |
| Ala Lys Asn Arg Leu Tyr Gln Ala Ile Gln Arg Ala Asp Asp Ile Leu | | |
| 130 | 135 | 140 |
| Asp Leu Lys Phe Cys Met Asp Gly Val Gln Thr Ala Leu Arg | | |
| 145 | 150 | 155 |
| | | 158 |

<210> 943
<211> 235
<212>Amino acid
<213> Homo sapiens

| | | |
|---|-----|-----|
| <400> 943 | | |
| Ala Val Glu Phe Arg Val Pro Arg Ser Gly Ser Ala Tyr Leu Tyr Ser | | |
| 1 | 5 | 10 |
| Tyr Val Thr Val Gly Glu Leu Trp Ala Phe Thr Thr Gly Trp Asn Leu | | 15 |
| 20 | 25 | 30 |
| Ile Leu Ser Tyr Val Ile Gly Thr Ala Ser Val Ala Arg Ala Trp Ser | | |
| 35 | 40 | 45 |
| Ser Ala Phe Asp Asn Leu Ile Gly Asn His Ile Ser Lys Thr Leu Gln | | |
| 50 | 55 | 60 |
| Gly Ser Ile Ala Leu His Val Pro His Val Leu Ala Glu Tyr Pro Asp | | |
| 65 | 70 | 75 |
| Phe Phe Ala Leu Gly Leu Val Leu Leu Leu Thr Gly Leu Leu Ala Leu | | 80 |
| 85 | 90 | 95 |
| Gly Ala Ser Glu Ser Ala Leu Val Thr Lys Val Phe Thr Gly Val Asn | | |
| 100 | 105 | 110 |
| Leu Leu Val Leu Gly Phe Val Met Ile Ser Gly Phe Val Lys Gly Asp | | |
| 115 | 120 | 125 |
| Val His Asn Trp Lys Leu Thr Glu Glu Asp Tyr Glu Leu Ala Met Ala | | |
| 130 | 135 | 140 |
| Glu Leu Asn Asp Thr Tyr Ser Leu Gly Pro Leu Gly Ser Gly Gly Phe | | |
| 145 | 150 | 155 |
| Val Pro Phe Gly Phe Glu Gly Ile Leu Arg Gly Ala Ala Thr Cys Phe | | 160 |
| 165 | 170 | 175 |
| Tyr Ala Phe Val Gly Phe Asp Cys Ile Ala Thr Thr Gly Glu Glu Ala | | |
| 180 | 185 | 190 |
| Gln Asn Pro Gln Arg Ser Ile Pro Met Gly Ile Gly Ile Ser Leu Ser | | |
| 195 | 200 | 205 |
| Val Cys Phe Leu Ala Asp Phe Ala Val Ser Ser Ala Leu Thr Leu Met | | |
| 210 | 215 | 220 |
| Met Pro Tyr Tyr Gln Leu Gln Pro Glu Ser Pro | | |
| 225 | 230 | 235 |

<210> 944
<211> 284
<212>Amino acid
<213> Homo sapiens

<400> 944

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gly | Phe | His | Pro | Asn | Thr | Thr | His | Tyr | Arg | Ala | Arg | Ala | Ala | Ala | Arg |
| 1 | | | | | | | | | | | | | | | 15 |
| Ala | Gly | Ala | Gly | Ser | Phe | Val | Gly | Glu | Val | Ser | Ala | Val | Asp | Lys | Asp |
| | | | | | | | | | | | | | | | 20 |
| Phe | Gly | Pro | Asn | Gly | Glu | Val | Arg | Tyr | Ser | Phe | Glu | Met | Val | Gln | Pro |
| | | | | | | | | | | | | | | | 25 |
| Asp | Phe | Glu | Leu | His | Ala | Ile | Ser | Gly | Ile | Thr | Asn | Thr | His | Gln | |
| | | | | | | | | | | | | | | | 30 |
| Phe | Asp | Arg | Glu | Ser | Leu | Met | Arg | Arg | Arg | Gly | Thr | Ala | Val | Phe | Ser |
| | | | | | | | | | | | | | | | 35 |
| Phe | Thr | Val | Ile | Ala | Thr | Asp | Gln | Gly | Ile | Pro | Gln | Pro | Leu | Lys | Asp |
| | | | | | | | | | | | | | | | 40 |
| Gln | Ala | Ala | Thr | Val | His | Val | Tyr | Met | Lys | Asp | Ile | Asn | Asp | Asn | Ala |
| | | | | | | | | | | | | | | | 45 |
| Lys | Phe | Leu | Lys | Asp | Phe | Tyr | Gln | Ala | Thr | Ile | Ser | Glu | Ser | Ala | Ala |
| | | | | | | | | | | | | | | | 50 |
| Asn | Ile | Thr | Gln | Val | Val | Leu | Arg | Val | Ser | Ala | Ser | Asp | Val | Asp | Gly |
| | | | | | | | | | | | | | | | 55 |
| Asn | Asn | Gly | Leu | Ile | His | Tyr | Ser | Ile | Ile | Lys | Gly | Asn | Glu | Glu | Arg |
| | | | | | | | | | | | | | | | 60 |
| Gln | Phe | Ala | Ile | Asp | Ser | Thr | Ser | Gly | Gln | Val | Thr | Leu | Ile | Gly | Lys |
| | | | | | | | | | | | | | | | 65 |
| Leu | Asp | Tyr | Glu | Ala | Thr | Pro | Ala | Tyr | Ser | Leu | Val | Ile | Gln | Ala | Val |
| | | | | | | | | | | | | | | | 70 |
| Asp | Ser | Gly | Thr | Ile | Pro | Leu | Asn | Ser | Thr | Cys | Thr | Leu | Asn | Ile | Asp |
| | | | | | | | | | | | | | | | 75 |
| Ile | Leu | Asp | Glu | Asn | Asp | Asn | Thr | Pro | Phe | Phe | Leu | Leu | Asn | Gln | His |
| | | | | | | | | | | | | | | | 80 |
| Phe | Phe | Val | Asp | Val | Leu | Glu | Asn | Met | Arg | Ile | Gly | Glu | Leu | Gly | Ala |
| | | | | | | | | | | | | | | | 85 |
| Ser | Gly | Thr | Ala | Thr | Asp | Ser | Ser | Gly | Asp | Ile | Ala | Asp | Leu | Tyr | |
| | | | | | | | | | | | | | | | 90 |
| Tyr | Lys | Phe | Thr | Gly | Thr | Lys | His | Pro | Pro | Gly | Thr | Phe | Ser | Ile | Ser |
| | | | | | | | | | | | | | | | 95 |
| Pro | Lys | His | Leu | Gly | Val | Phe | Phe | Leu | Ala | Gln | Lys | | | | |
| | | | | | | | | | | | | | | | 100 |
| | | | | | | | | | | | | | | | 105 |
| | | | | | | | | | | | | | | | 110 |
| | | | | | | | | | | | | | | | 115 |
| | | | | | | | | | | | | | | | 120 |
| | | | | | | | | | | | | | | | 125 |
| | | | | | | | | | | | | | | | 130 |
| | | | | | | | | | | | | | | | 135 |
| | | | | | | | | | | | | | | | 140 |
| | | | | | | | | | | | | | | | 145 |
| | | | | | | | | | | | | | | | 150 |
| | | | | | | | | | | | | | | | 155 |
| | | | | | | | | | | | | | | | 160 |
| | | | | | | | | | | | | | | | 165 |
| | | | | | | | | | | | | | | | 170 |
| | | | | | | | | | | | | | | | 175 |
| | | | | | | | | | | | | | | | 180 |
| | | | | | | | | | | | | | | | 185 |
| | | | | | | | | | | | | | | | 190 |
| | | | | | | | | | | | | | | | 195 |
| | | | | | | | | | | | | | | | 200 |
| | | | | | | | | | | | | | | | 205 |
| | | | | | | | | | | | | | | | 210 |
| | | | | | | | | | | | | | | | 215 |
| | | | | | | | | | | | | | | | 220 |
| | | | | | | | | | | | | | | | 225 |
| | | | | | | | | | | | | | | | 230 |
| | | | | | | | | | | | | | | | 235 |
| | | | | | | | | | | | | | | | 240 |
| | | | | | | | | | | | | | | | 245 |
| | | | | | | | | | | | | | | | 250 |
| | | | | | | | | | | | | | | | 255 |
| | | | | | | | | | | | | | | | 260 |
| | | | | | | | | | | | | | | | 265 |
| | | | | | | | | | | | | | | | 270 |
| | | | | | | | | | | | | | | | 275 |
| | | | | | | | | | | | | | | | 280 |
| | | | | | | | | | | | | | | | 284 |

<210> 945
<211> 119
<212>Amino acid
<213> Homo sapiens

<400> 945

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gly | Asp | Cys | Tyr | Asp | Leu | Tyr | Gly | Gly | Glu | Lys | Phe | Ala | Thr | Leu | Ala |
| 1 | | | | | | | | | | | | | | | 15 |
| Glu | Leu | Val | Gln | Tyr | Tyr | Met | Glu | His | His | Gly | Gln | Leu | Lys | Glu | |
| | | | | | | | | | | | | | | | 20 |
| Asn | Gly | Asp | Val | Ile | Glu | Leu | Lys | Asn | Pro | Leu | Asn | Cys | Ala | Asp | Pro |
| | | | | | | | | | | | | | | | 25 |
| Thr | Ser | Gln | Arg | Trp | Phe | His | Gly | His | Leu | Ser | Gly | Lys | Glu | Ala | Glu |
| | | | | | | | | | | | | | | | 30 |
| Lys | Leu | Leu | Thr | Glu | Lys | Lys | His | Ser | Ser | Phe | Leu | Val | Arg | Glu | |
| | | | | | | | | | | | | | | | 35 |
| Ser | Gln | Ser | His | Pro | Gly | Asp | Phe | Val | Leu | Ser | Val | Cys | Thr | Gly | Asp |
| | | | | | | | | | | | | | | | 40 |
| Asp | Lys | Gly | Glu | Ser | Asn | Asp | Gly | Lys | Ser | Lys | Val | Thr | His | Val | Met |
| | | | | | | | | | | | | | | | 45 |

| | | |
|-----------------------------|-----|--|
| 100 | 105 | |
| Ile His Cys Gln Glu Leu Lys | | |
| 115 | 119 | |

110

<210> 946
<211> 166
<212>Amino acid
<213> Homo sapiens

<400> 946

| | | | |
|---|-----|-----|-----|
| Ile Asp Ser Gly Asn Gln Asn Gly Gly Asn Asp Asp Lys Thr Lys Asn | | | |
| 1 | 5 | 10 | 15 |
| Ala Glu Arg Asn Tyr Leu Asn Val Leu Pro Gly Glu Phe Tyr Ile Thr | | | |
| 20 | 25 | 30 | |
| Arg His Ser Asn Leu Ser Glu Ile His Val Ala Phe His Leu Cys Val | | | |
| 35 | 40 | 45 | |
| Asp Asp His Val Lys Ser Gly Asn Ile Thr Ala Arg Asp Pro Ala Ile | | | |
| 50 | 55 | 60 | |
| Met Gly Leu Arg Asn Ile Leu Lys Val Cys Cys Thr His Asp Ile Thr | | | |
| 65 | 70 | 75 | 80 |
| Thr Ile Ser Ile Pro Leu Leu Leu Val His Asp Met Ser Glu Glu Met | | | |
| 85 | 90 | 95 | |
| Thr Ile Pro Trp Cys Leu Arg Arg Ala Glu Leu Val Phe Lys Cys Val | | | |
| 100 | 105 | 110 | |
| Lys Gly Phe Met Met Glu Met Ala Ser Trp Asp Gly Gly Ile Ser Arg | | | |
| 115 | 120 | 125 | |
| Thr Val Gln Phe Leu Val Pro Gln Ser Ile Ser Glu Glu Met Phe Tyr | | | |
| 130 | 135 | 140 | |
| Gln Leu Ser Asn Met Leu Pro Gln Ile Phe Arg Val Ser Ser Thr Leu | | | |
| 145 | 150 | 155 | 160 |
| Thr Leu Thr Ser Lys His | | | |
| 165 | 166 | | |

<210> 947
<211> 121
<212>Amino acid
<213> Homo sapiens

<400> 947

| | | | |
|---|-----|-----|----|
| Ser Ile Leu Pro Ala Leu Leu Val Thr Ile Leu Ile Phe Met Asp Gln | | | |
| 1 | 5 | 10 | 15 |
| Gln Ile Thr Ala Val Ile Val Asn Arg Lys Glu Asn Lys Leu Lys Lys | | | |
| 20. | 25 | 30 | |
| Ala Ala Gly Tyr His Leu Asp Leu Phe Trp Val Gly Ile Leu Met Ala | | | |
| 35 | 40 | 45 | |
| Leu Cys Ser Phe Met Gly Leu Pro Trp Tyr Val Ala Ala Thr Val Ile | | | |
| 50 | 55 | 60 | |
| Ser Ile Ala His Ile Asp Ser Leu Lys Met Glu Thr Glu Thr Ser Ala | | | |
| 65 | 70 | 75 | 80 |
| Pro Gly Glu Gln Pro Gln Phe Leu Gly Val Arg Glu Gln Arg Val Thr | | | |
| 85 | 90 | 95 | |
| Gly Ile Ile Val Phe Ile Leu Thr Gly Ile Ser Val Phe Leu Ala Pro | | | |
| 100 | 105 | 110 | |
| Ille Leu Lys Cys Ile Pro Leu Pro Val | | | |

115

120 121

<210> 948
<211> 191
<212>Amino acid
<213> Homo sapiens

<400> 948
Gly Ala Ser Arg Val Glu Ala Gly Ser Ala Asn Gly Met Leu Ile Asp
1 5 10 15
Gly Gly Ser Gln Ile Val Lys Val Gln Gly His Ala Asp Gly Thr Thr
20 25 30
Ile Asn Lys Ser Gly Ser Gln Asp Val Val Gln Gly Ser Leu Ala Thr
35 40 45
Asn Thr Thr Ile Asn Gly Gly Arg Gln Tyr Val Glu Gln Ser Thr Val
50 55 60
Glu Thr Thr Thr Ile Lys Asn Gly Gly Glu Gln Arg Val Tyr Glu Ser
65 70 75 80
Arg Ala Leu Asp Thr Thr Ile Glu Gly Gly Thr Gln Ser Leu Asn Ser
85 90 95
Lys Ser Thr Ala Lys Asn Thr His Ile Tyr Ser Gly Gly Thr Gln Ile
100 105 110
Val Asp Asn Thr Ser Thr Ser Asp Val Ile Glu Val Tyr Ser Gly Gly
115 120 125
Val Leu Asp Val Arg Gly Gly Thr Ala Thr Asn Val Thr Gln His Asp
130 135 140
Gly Ala Ile Leu Lys Thr Asn Thr Asn Gly Thr Thr Val Ser Gly Thr
145 150 155 160
Asn Ser Glu Gly Ala Phe Ser Ile His Asn His Val Ala Asp Asn Val
165 170 175
Leu Leu Glu Asn Gly Gly His Leu Asp Ile Asn Ala Tyr Gly Ser
180 185 190 191

<210> 949
<211> 98
<212>Amino acid
<213> Homo sapiens

<400> 949
Phe Phe Ser Ser Ile Gln Leu Thr Asp Asp Gln Gly Pro Val Leu Met
1 5 10 15
Thr Thr Val Ala Met Pro Val Phe Ser Lys Gln Asn Glu Thr Arg Ser
20 25 30
Lys Gly Ile Leu Leu Gly Val Val Gly Thr Asp Val Pro Val Lys Glu
35 40 45
Leu Leu Lys Thr Ile Pro Lys Tyr Lys Val Met Asn Asp Leu Ile Pro
50 55 60
Glu Ile Lys Ala Thr Glu Met Pro Arg Ala Leu Phe Ser Gln Ser Ser
65 70 75 80
Gly Phe Lys Leu Tyr Phe Gly Ala Met Phe Leu Leu Thr Thr Ile Thr
85 90 95
Ala Cys
98

<210> 950
<211> 196
<212>Amino acid
<213> Homo sapiens

<400> 950
Ser Cys Ser Gly Thr Gly Thr Asn Ala Cys Tyr Met Glu Asp Met Ser
1 5 10 15
Asn Ile Asp Leu Val Glu Gly Asp Glu Gly Arg Met Cys Ile Asn Thr
20 25 30
Glu Trp Gly Ala Phe Gly Asp Asp Gly Ala Leu Glu Asp Ile Arg Thr
35 40 45
Glu Phe Asp Arg Glu Leu Asp Leu Gly Ser Leu Asn Pro Gly Lys Gln
50 55 60
Leu Phe Glu Lys Met Ile Ser Gly Leu Tyr Leu Gly Glu Leu Val Arg
65 70 75 80
Leu Ile Leu Leu Lys Met Ala Lys Ala Gly Leu Leu Phe Gly Gly Glu
85 90 95
Lys Ser Ser Ala Leu His Thr Lys Gly Lys Ile Glu Thr Arg His Val
100 105 110
Ala Ala Met Glu Lys Tyr Lys Glu Gly Leu Ala Asn Thr Arg Glu Ile
115 120 125
Leu Val Asp Leu Gly Leu Glu Pro Ser Glu Ala Asp Cys Ile Ala Val
130 135 140
Gln His Val Cys Thr Ile Val Ser Phe Arg Ser Ala Asn Leu Cys Ala
145 150 155 160
Ala Ala Leu Ala Ala Ile Leu Thr Arg Leu Arg Glu Asn Lys Lys Val
165 170 175
Glu Arg Leu Arg Thr Thr Val Gly Met Asp Gly Thr Leu Tyr Lys Ile
180 185 190
His Pro Gln Tyr
195 196

<210> 951
<211> 721
<212>Amino acid
<213> Homo sapiens

<400> 951
Phe Val Ala Ile Ala Thr Asn Gly Val Val Pro Ala Gly Gly Ser Tyr
1 5 10 15
Tyr Met Ile Ser Arg Ser Leu Gly Pro Glu Phe Gly Ala Val Gly
20 25 30
Leu Cys Phe Tyr Leu Gly Thr Thr Phe Ala Gly Ala Met Tyr Ile Leu
35 40 45
Gly Thr Ile Glu Ile Leu Leu Ala Tyr Leu Phe Pro Ala Met Ala Ile
50 55 60
Phe Lys Ala Glu Asp Ala Ser Gly Glu Ala Ala Ala Met Leu Asn Asn
65 70 75 80
Met Arg Val Tyr Gly Thr Cys Val Leu Thr Cys Met Ala Thr Val Val
85 90 95
Phe Val Gly Val Lys Tyr Val Asn Lys Phe Ala Leu Val Phe Leu Gly
100 105 110
Cys Val Ile Leu Ser Ile Leu Ala Ile Tyr Ala Gly Val Ile Lys Ser

| | | |
|---|-----|-----|
| 115 | 120 | 125 |
| Ala Phe Asp Pro Pro Asn Phe Pro Ile Cys Leu Leu Gly Asn Arg Thr | | |
| 130 | 135 | 140 |
| Leu Ser Arg His Gly Phe Asp Val Cys Ala Lys Leu Ala Trp Glu Gly | | |
| 145 | 150 | 155 |
| Asn Glu Thr Val Thr Arg Leu Trp Gly Leu Phe Cys Ser Ser Arg | | 160 |
| . 165 | 170 | 175 |
| Phe Leu Asn Ala Thr Cys Asp Glu Tyr Phe Thr Arg Asn Asn Val Thr | | |
| 180 | 185 | 190 |
| Glu Ile Gln Gly Ile Pro Gly Ala Ala Ser Gly Leu Ile Lys Glu Asn | | |
| 195 | 200 | 205 |
| Leu Trp Ser Ser Tyr Leu Thr Lys Gly Val Ile Val Glu Arg Ser Gly | | |
| 210 | 215 | 220 |
| Met Thr Ser Val Gly Leu Ala Asp Gly Thr Pro Ile Asp Met Asp His | | |
| 225 | 230 | 235 |
| Pro Tyr Val Phe Ser Asp Met Thr Ser Tyr Phe Thr Leu Leu Val Gly | | 240 |
| 245 | 250 | 255 |
| Ile Tyr Phe Pro Ser Val Thr Gly Ile Met Ala Gly Ser Asn Arg Ser | | |
| 260 | 265 | 270 |
| Gly Asp Leu Arg Asp Ala Gln Lys Ser Ile Pro Thr Gly Thr Ile Leu | | |
| 275 | 280 | 285 |
| Ala Ile Ala Thr Thr Ser Ala Val Tyr Ile Ser Ser Val Val Leu Phe | | |
| 290 | 295 | 300 |
| Gly Ala Cys Ile Glu Gly Val Val Leu Arg Asp Lys Phe Gly Glu Ala | | |
| 305 | 310 | 315 |
| Val Asn Gly Asn Leu Val Val Gly Thr Leu Ala Trp Pro Ser Pro Trp | | 320 |
| 325 | 330 | 335 |
| Val Ile Val Ile Gly Ser Phe Ser Thr Cys Gly Ala Gly Leu Gln | | |
| 340 | 345 | 350 |
| Ser Leu Thr Gly Ala Pro Arg Leu Leu Gln Ala Ile Ser Arg Asp Gly | | |
| 355 | 360 | 365 |
| Ile Val Pro Phe Leu Gln Val Phe Gly His Gly Lys Ala Asn Gly Glu | | |
| 370 | 375 | 380 |
| Pro Thr Trp Ala Leu Leu Thr Ala Cys Ile Cys Glu Ile Gly Ile | | |
| 385 | 390 | 395 |
| Leu Ile Ala Ser Leu Asp Glu Val Ala Pro Ile Leu Ser Met Phe Phe | | 400 |
| 405 | 410 | 415 |
| Leu Met Cys Tyr Met Phe Val Asn Leu Ala Cys Ala Val Gln Thr Leu | | |
| 420 | 425 | 430 |
| Leu Arg Thr Pro Asn Trp Arg Pro Arg Phe Arg Tyr Tyr His Trp Thr | | |
| 435 | 440 | 445 |
| Leu Ser Phe Leu Gly Met Ser Leu Cys Leu Ala Leu Met Phe Ile Cys | | |
| 450 | 455 | 460 |
| Ser Trp Tyr Tyr Ala Leu Val Ala Met Leu Ile Ala Gly Leu Ile Tyr | | |
| 465 | 470 | 475 |
| Lys Tyr Ile Glu Tyr Arg Gly Ala Lys Lys Glu Trp Gly Asp Gly Ile | | |
| 485 | 490 | 495 |
| Arg Gly Leu Ser Leu Ser Ala Ala Arg Tyr Ala Leu Leu Arg Leu Glu | | |
| 500 | 505 | 510 |
| Glu Gly Pro Pro His Thr Lys Asn Trp Arg Pro Gln Leu Leu Val Leu | | |
| 515 | 520 | 525 |
| Val Arg Val Asp Gln Asp Gln Asn Val Val His Pro Gln Leu Leu Ser | | |
| 530 | 535 | 540 |
| Leu Thr Ser Gln Leu Lys Ala Gly Lys Gly Leu Thr Ile Val Gly Ser | | |
| 545 | 550 | 555 |
| Val Leu Glu Gly Thr Phe Leu Glu Asn His Pro Gln Ala Gln Arg Ala | | |
| 565 | 570 | 575 |
| Glu Glu Ser Ile Arg Arg Leu Met Glu Ala Glu Lys Val Lys Gly Phe | | |
| 580 | 585 | 590 |
| Cys Gln Val Val Ile Ser Ser Asn Leu Arg Asp Gly Val Ser His Leu | | |
| 595 | 600 | 605 |
| Ile Gln Ser Gly Gly Leu Gly Leu Gln His Asn Thr Val Leu Val | | |
| 610 | 615 | 620 |
| Gly Trp Pro Arg Asn Trp Arg Gln Lys Glu Asp His Gln Thr Trp Arg | | |

| | | | |
|---|-----|-----|-----|
| 625 | 630 | 635 | 640 |
| Asn Phe Ile Glu Leu Val Arg Glu Thr Thr Ala Gly His Leu Ala Leu | | | |
| 645 | 650 | 655 | 655 |
| Leu Val Thr Lys Asn Val Ser Met Phe Pro Gly Asn Pro Glu Arg Phe | | | |
| 660 | 665 | 670 | 670 |
| Ser Glu Gly Ser Ile Asp Arg Trp Gly Ile Gly His Asp Gly Gly Met | | | |
| 675 | 680 | 685 | 685 |
| Leu Met Leu Val Pro Phe Leu Leu Arg His His Lys Val Trp Arg Lys | | | |
| 690 | 695 | 700 | 700 |
| Cys Lys Met Arg Ile Phe Thr Val Ala Gln Met Val Asp Met His Ala | | | |
| 705 | 710 | 715 | 720 |
| Met | | | |
| 721 | | | |

<210> 952
<211> 42
<212>Amino acid
<213> Homo sapiens

| | | | |
|---|----|----|----|
| <400> 952 | | | |
| Phe Tyr Leu Arg Leu Leu Ser Phe Phe Cys Phe Gln Glu His Glu Lys | | | |
| 1 | 5 | 10 | 15 |
| Arg Cys Trp Ser Val Asp Phe Asn Leu Met Asp Pro Lys Leu Leu Ala | | | |
| 20 | 25 | 30 | |
| Ser Gly Ser Asp Asp Ala Lys Gly Thr Val | | | |
| 35 | 40 | 42 | |

<210> 953
<211> 80
<212>Amino acid
<213> Homo sapiens

| | | | |
|---|----|----|----|
| <400> 953 | | | |
| Arg Asn Ser Lys Ala Met His Arg Ser Ser Cys Asp Gly Pro Leu Leu | | | |
| 1 | 5 | 10 | 15 |
| Ser Leu Pro Ser Val Gly Arg Ser Ala Thr His Ala Leu Val Gln Ala | | | |
| 20 | 25 | 30 | |
| Gln Leu Ile Cys Ser Gly Ala Arg Arg Gly Met His Ala Phe Ile Val | | | |
| 35 | 40 | 45 | |
| Pro Ile Arg Ser Leu Gln Asp His Thr Pro Leu Pro Gly Lys Pro Ile | | | |
| 50 | 55 | 60 | |
| Met Leu Pro Gln Gly Thr Leu Pro Gly Gly Glu Pro Arg Trp Pro Pro | | | |
| 65 | 70 | 75 | 80 |

<210> 954
<211> 202
<212>Amino acid
<213> Homo sapiens

<400> 954

Cys Gly Thr Leu Ile Leu Gln Ala Arg Ala Tyr Val Gly Pro His Val
 1 5 10 15
 Leu Ala Val Val Thr Arg Thr Gly Phe Cys Thr Ala Lys Gly Gly Leu
 20 25 30
 Val Ser Ser Ile Leu His Pro Arg Pro Ile Asn Phe Lys Phe Tyr Lys
 35 40 45
 His Ser Met Lys Phe Val Ala Ala Leu Ser Val Leu Ala Leu Leu Gly
 50 55 60
 Thr Ile Tyr Ser Ile Phe Ile Leu Tyr Arg Asn Arg Val Pro Leu Asn
 65 70 75 80
 Glu Ile Val Ile Arg Ala Leu Asp Leu Val Thr Val Val Val Pro Pro
 85 90 95
 Ala Leu Pro Ala Ala Met Thr Val Cys Thr Leu Tyr Ala Gln Ser Arg
 100 105 110
 Leu Arg Arg Gln Gly Ile Phe Cys Ile His Pro Leu Arg Ile Asn Leu
 115 120 125
 Gly Gly Lys Leu Gln Leu Val Cys Phe Asp Lys Thr Gly Thr Leu Thr
 130 135 140
 Glu Asp Gly Leu Asp Val Met Gly Val Val Pro Leu Lys Gly Gln Ala
 145 150 155 160
 Phe Leu Pro Leu Val Pro Glu Pro Arg Arg Leu Pro Val Gly Pro Leu
 165 170 175
 Leu Arg Ala Leu Ala Thr Cys His Ala Leu Ser Arg Leu Gln Asp Thr
 180 185 190
 Pro Val Gly Asp Pro Met Asp Leu Lys Met
 195 200 202

<210> 955

<211> 188

<212>Amino acid

<213> Homo sapiens

<400> 955

Gln Ile Glu Tyr Phe Arg Ser Leu Leu Asp Glu His His Ile Ser Tyr
 1 5 10 15
 Val Ile Asp Glu Asp Val Lys Ser Gly Arg Tyr Met Glu Leu Glu Gln
 20 25 30
 Arg Tyr Met Asp Leu Ala Glu Asn Ala Arg Phe Glu Arg Glu Gln Leu
 35 40 45
 Leu Gly Val Gln Gln His Leu Ser Asn Thr Leu Lys Met Ala Glu Gln
 50 55 60
 Asp Asn Lys Glu Ala Gln Glu Met Ile Gly Ala Leu Lys Glu Arg Ser
 65 70 75 80
 His His Met Glu Arg Ile Ile Glu Ser Glu Gln Lys Gly Lys Ala Ala
 85 90 95
 Leu Ala Ala Thr Leu Glu Glu Tyr Lys Ala Thr Val Ala Ser Asp Gln
 100 105 110
 Ile Glu Met Asn Arg Leu Lys Ala Gln Leu Glu Asn Glu Lys Gln Lys
 115 120 125
 Val Ala Glu Leu Tyr Ser Ile His Asn Ser Gly Asp Lys Ser Asp Ile
 130 135 140
 Gln Asp Leu Leu Glu Ser Val Arg Leu Asp Lys Glu Lys Ala Glu Thr
 145 150 155 160
 Leu Ala Ser Ser Leu Gln Glu Asp Leu Ala His Thr Arg Asn Asp Ala
 165 170 175
 Asn Arg Leu Glu Asp Ala Ile Ala Lys Gly Arg Gly

180

185

188

<210> 956
<211> 132
<212>Amino acid
<213> Homo sapiens

<400> 956
Ala Arg Tyr Arg Phe Thr Leu Ser Ala Arg Thr Gln Val Gly Ser Gly
1 5 10 15
Glu Ala Val Thr Glu Glu Ser Pro Ala Pro Pro Asn Glu Ala Thr Pro
20 25 30
Thr Ala Ala Pro Pro Thr Leu Pro Pro Thr Thr Val Gly Ala Thr Gly
35 40 45
Ala Val Ser Ser Thr Asp Ala Thr Ala Ile Ala Ala Thr Thr Glu Ala
50 55 60
Thr Thr Val Pro Ile Ile Pro Thr Val Ala Pro Thr Thr Met Ala Thr
65 70 75 80
Thr Thr Thr Val Ala Thr Thr Thr Thr Ala Ala Ala Thr Thr
85 90 95
Thr Thr Glu Ser Pro Pro Thr Thr Thr Ser Gly Thr Lys Ile His Glu
100 105 110
Ser Ala Pro Asp Glu Gln Ser Ile Trp Asn Val Thr Val Leu Pro Asn
115 120 125
Ser Lys Trp Ala
130 132

<210> 957
<211> 220
<212>Amino acid
<213> Homo sapiens

<400> 957
Leu Lys Ser Thr Gln Asp Glu Ile Asn Gln Ala Arg Ser Lys Leu Ser
1 5 10 15
Gln Leu His Glu Ser Arg Gln Glu Ala His Arg Ser Leu Glu Gln Tyr
20 25 30
Asp Gln Val Leu Asp Gly Ala His Gly Ala Ser Leu Thr Asp Leu Ala
35 40 45
Asn Leu Ser Glu Gly Val Ser Leu Ala Glu Arg Gly Ser Phe Gly Ala
50 55 60
Met Asp Asp Pro Phe Lys Asn Lys Ala Leu Leu Phe Ser Asn Asn Thr
65 70 75 80
Gln Glu Leu His Pro Asp Pro Phe Gln Thr Glu Asp Pro Phe Lys Ser
85 90 95
Asp Pro Phe Lys Gly Ala Asp Pro Phe Lys Gly Asp Pro Phe Gln Asn
100 105 110
Asp Pro Phe Ala Glu Gln Gln Thr Thr Ser Thr Asp Pro Phe Gly Gly
115 120 125
Asp Pro Phe Lys Glu Ser Asp Pro Phe Arg Gly Ser Ala Thr Asp Asp
130 135 140
Phe Lys Lys Gln Thr Lys Asn Asp Pro Phe Thr Ser Asp Pro Phe
145 150 155 160
Thr Lys Asn Pro Ser Leu Pro Ser Lys Leu Asp Pro Phe Glu Ser Ser

| | | | |
|---|-----|-----|-----|
| Asp Pro Phe Ser Ser Ser Val Ser Ser Lys Gly Ser Asp Pro Phe | 165 | 170 | 175 |
| 180 | 185 | 190 | |
| Gly Thr Leu Asp Pro Phe Gly Ser Gly Ser Phe Asn Ser Ala Glu Gly | 195 | 200 | 205 |
| Phe Ala Asp Phe Ser Thr Ile Glu Gly Arg Arg Gly | 210 | 215 | 220 |

<210> 958
<211> 250
<212>Amino acid
<213> Homo sapiens

| | | | | |
|---|-------|-----|-----|-----|
| Arg Thr Arg Gly Gly Ser Gly Ser Asn Ser Gln Pro Ser Leu Arg Glu | <400> | 958 | | |
| 1 | 5 | 10 | 15 | |
| Gly His Asp Lys Pro Val Phe Asn Gly Ala Gly Lys Pro His Ser Ser | 20 | 25 | 30 | |
| Thr Ser Ser Pro Ser Val Pro Lys Thr Ser Ala Ser Arg Thr Gln Lys | 35 | 40 | 45 | |
| Ser Ala Val Glu His Lys Ala Lys Lys Ser Leu Ser His Pro Ser His | 50 | 55 | 60 | |
| Ser Arg Pro Gly Pro Met Val Thr Pro His Asn Lys Ala Lys Ser Pro | 65 | 70 | 75 | 80 |
| Gly Val Arg Gln Pro Gly Ser Ser Ser Ser Ala Pro Gly Gln Pro | 85 | 90 | 95 | |
| Ser Thr Gly Val Ala Arg Pro Thr Val Ser Ser Gly Pro Val Pro Arg | 100 | 105 | 110 | |
| Arg Gln Asn Gly Ser Ser Ser Ser Gly Pro Glu Arg Ser Ile Ser Gly | 115 | 120 | 125 | |
| Ser Lys Lys Pro Thr Asn Asp Ser Asn Pro Ser Arg Arg Thr Val Ser | 130 | 135 | 140 | |
| Gly Thr Cys Gly Pro Gly Gln Pro Ala Ser Ser Ser Gly Gly Pro Gly | 145 | 150 | 155 | 160 |
| Arg Pro Ile Ser Gly Ser Val Ser Ser Ala Arg Pro Leu Gly Ser Ser | 165 | 170 | 175 | |
| Arg Gly Pro Gly Arg Pro Val Ser Ser Pro His Glu Leu Arg Arg Pro | 180 | 185 | 190 | |
| Val Ser Gly Leu Gly Pro Pro Gly Arg Ser Val Ser Gly Pro Gly Arg | 195 | 200 | 205 | |
| Ser Ile Ser Gly Ser Ile Pro Ala Gly Arg Thr Val Ser Asn Ser Val | 210 | 215 | 220 | |
| Pro Gly Arg Pro Val Ser Ser Leu Gly Pro Gly Gln Thr Val Ser Ser | 225 | 230 | 235 | 240 |
| Ser Gly Pro Thr Ile Lys Pro Lys Cys Thr | 245 | 250 | | |

<210> 959
<211> 48
<212>Amino acid
<213> Homo sapiens

<400> 959
Arg Gly Lys Gly Ile Thr Pro Arg Tyr His Leu Cys Ile Ser Asp Pro

| | | | |
|---|----|----|----|
| 1 | 5 | 10 | 15 |
| His Asn Leu Lys Ile Cys Cys Arg Val Asn Gly Glu Val Val Gln Ser | | | |
| 20 | 25 | 30 | |
| Ser Asn Thr Asn Gln Met Val Phe Lys Thr Glu Asp Leu Ile Ala Trp | | | |
| 35 | 40 | 45 | 48 |

<210> 960
<211> 63
<212>Amino acid
<213> Homo sapiens

| | | | |
|---|----|----|----|
| <400> 960 | | | |
| Val Val Ala Val Val Thr Arg Trp Leu Cys Glu Asn Gly Val Ser Tyr Leu | | | |
| 1 | 5 | 10 | 15 |
| Arg Lys Cys Val Cys Ser Ala Cys Arg His Gly Thr Arg Cys Ala Gly | | | |
| 20 | 25 | 30 | |
| Glu Val Ala Ala Ala Ala Asn Asn Ser His Cys Thr Val Gly Ile Ala | | | |
| 35 | 40 | 45 | |
| Phe Asn Ala Lys Ile Gly Gly Met Gly Asn Gln Leu Thr Trp Met | | | |
| 50 | 55 | 60 | 63 |

<210> 961
<211> 59
<212>Amino acid
<213> Homo sapiens

| | | | |
|---|----|----|----|
| <400> 961 | | | |
| Gly Ala Pro Pro Pro Phe Val Pro Thr Leu Lys Ser Asp Asp Asp Thr | | | |
| 1 | 5 | 10 | 15 |
| Ser Asn Phe Asp Glu Pro Lys Lys Asn Ser Trp Val Ser Ser Ser Pro | | | |
| 20 | 25 | 30 | |
| Cys Gln Leu Ser Pro Ser Gly Phe Ser Gly Glu Glu Leu Pro Phe Val | | | |
| 35 | 40 | 45 | |
| Gly Phe Ser Tyr Ser Lys Ala Leu Gly Ile Leu | | | |
| 50 | 55 | 59 | |

<210> 962
<211> 140
<212>Amino acid
<213> Homo sapiens

| | | | |
|---|----|----|----|
| <400> 962 | | | |
| Phe Val Glu Arg Leu Ala His Leu His Ala Ala Cys Ala Pro Arg Arg | | | |
| 1 | 5 | 10 | 15 |
| Lys Val Ala Leu Leu Leu Glu Val Cys Arg Asp Val Tyr Ala Gly Leu | | | |
| 20 | 25 | 30 | |
| Ala Arg Gly Glu Asn Gln Asp Pro Leu Gly Ala Asp Ala Phe Leu Pro | | | |

| | | | |
|---|-----|-----|----|
| | 35 | 40 | 45 |
| Ala Leu Thr Glu Glu Leu Ile Trp Ser Pro Asp Ile Gly Asp Thr Gln | | | |
| 50 | 55 | 60 | |
| Leu Asp Val Glu Phe Leu Met Glu Leu Leu Asp Pro Asp Glu Leu Arg | | | |
| 65 | 70 | 75 | 80 |
| Gly Glu Ala Gly Tyr Tyr Leu Thr Thr Trp Phe Gly Ala Leu His His | | | |
| 85 | 90 | 95 | |
| Ile Ala His Tyr Gln Pro Glu Thr Asp Arg Ala Pro Arg Gly Leu Ser | | | |
| 100 | 105 | 110 | |
| Ser Glu Ala Arg Ala Ser Leu His Gln Trp His Arg Arg Arg Thr Leu | | | |
| 115 | 120 | 125 | |
| His Arg Lys Asp His Pro Arg Ala Gln Gln Leu Asp | | | |
| 130 | 135 | 140 | |

<210> 963
 <211> 153
 <212>Amino acid
 <213> Homo sapiens

| | | | |
|---|-----------|-----|----|
| | <400> 963 | | |
| Phe Trp Met Asp Pro Tyr Asn Pro Leu Asn Phe Lys Ala Pro Phe Gln | | | |
| 1 | 5 | 10 | 15 |
| Thr Ser Gly Glu Asn Glu Lys Gly Cys Arg Asp Ser Lys Thr Pro Ser | | | |
| 20 | 25 | 30 | |
| Glu Ser Ile Val Ala Ile Ser Glu Cys His Thr Leu Leu Ser Cys Lys | | | |
| 35 | 40 | 45 | |
| Val Gln Leu Leu Gly Ser Gln Glu Ser Glu Cys Pro Asp Ser Val Gln | | | |
| 50 | 55 | 60 | |
| Arg Asp Val Leu Ser Gly Gly Arg His Thr His Val Lys Arg Lys Lys | | | |
| 65 | 70 | 75 | 80 |
| Val Thr Phe Leu Glu Glu Val Thr Glu Tyr Tyr Ile Ser Gly Asp Glu | | | |
| 85 | 90 | 95 | |
| Asp Arg Lys Gly Pro Trp Glu Glu Phe Ala Arg Asp Gly Cys Arg Phe | | | |
| 100 | 105 | 110 | |
| Gln Lys Arg Ile Gln Glu Thr Glu Asp Ala Ile Gly Tyr Cys Leu Thr | | | |
| 115 | 120 | 125 | |
| Phe Glu His Arg Glu Arg Met Phe Asn Arg Leu Gln Gly Thr Cys Phe | | | |
| 130 | 135 | 140 | |
| Lys Gly Leu Asn Val Leu Lys Gln Cys | | | |
| 145 | 150 | 153 | |

<210> 964
 <211> 54
 <212>Amino acid
 <213> Homo sapiens

| | | | |
|---|-----------|----|----|
| | <400> 964 | | |
| Ala Ala Ser Thr Ala Tyr Ser Phe Phe Gly Thr Val Glu Asn Met Ala | | | |
| 1 | 5 | 10 | 15 |
| Pro Lys Val Val Asn Arg Pro Gly His Thr Gln Ser Ala Asp Trp Gly | | | |
| 20 | 25 | 30 | |
| Ser Phe Gly Gly Leu Met Gly Arg Phe Glu Phe Gly Ile Phe Leu Lys | | | |
| 35 | 40 | 45 | |
| Gly Lys Glu Ile Val Lys | | | |

50

54

<210> 965
<211> 39
<212>Amino acid
<213> Homo sapiens

<400> 965
Gly Phe Val Phe Leu Pro Gly Pro Met Ser Val Gly Leu Asp Phe Ser
1 5 10 15
Leu Pro Gly Met Glu His Val Tyr Gly Ile Pro Glu His Ala Asp Asn
20 25 30
Leu Arg Leu Lys Val Thr Glu
35 39

<210> 966
<211> 130
<212>Amino acid
<213> Homo sapiens

<400> 966
Gly Ser Glu Cys Gln Gly Thr Asp Leu Asp Thr Arg Asn Cys Thr Ser
1 5 10 15
Asp Leu Cys Val His Thr Ala Ser Gly Pro Glu Asp Val Ala Leu Tyr
20 25 30
Val Gly Leu Ile Ala Val Ala Val Cys Leu Val Leu Leu Leu Val
35 40 45
Leu Ile Leu Val Tyr Cys Arg Lys Lys Glu Gly Leu Asp Ser Asp Val
50 55 60
Ala Asp Ser Ser Ile Leu Thr Ser Gly Phe Gln Pro Val Ser Ile Lys
65 70 75 80
Pro Ser Lys Ala Asp Asn Pro His Leu Leu Thr Ile Gln Pro Asp Leu
85 90 95
Ser Thr Thr Thr Tyr Gln Gly Ser Leu Cys Pro Arg Gln Asp
100 105 110
Gly Pro Ser Pro Lys Phe Gln Leu Thr Asn Gly His Leu Leu Ser Pro
115 120 125
Leu Gly
130

<210> 967
<211> 259
<212>Amino acid
<213> Homo sapiens

<400> 967
Leu Ile Tyr Asn Glu Asp Met Ile Cys Trp Ile Glu Ser Arg Glu Ser
1 5 10 15
Ser Asn Gln Leu Lys Cys Ile Gln Ile Thr Lys Ala Gly Leu Thr

| | | | |
|---|-----|-----|-----|
| Asp Glu Trp Thr Ile Asn Ile Leu Gln Ser Phe His Asn Val Gln Gln | 20 | 25 | 30 |
| Met Ala Ile Asp Trp Leu Thr Arg Asn Leu Tyr Phe Val Asp His Val | 35 | 40 | 45 |
| Gly Asp Arg Ile Phe Val Cys Asn Ser Asn Gly Ser Val Cys Val Thr | 50 | 55 | 60 |
| Leu Ile Asp Leu Glu Leu His Asn Pro Lys Ala Ile Ala Val Asp Pro | 65 | 70 | 75 |
| Ile Ala Gly Lys Leu Phe Phe Thr Asp Tyr Gly Asn Val Ala Lys Val | 85 | 90 | 95 |
| Glu Arg Cys Asp Met Asp Gly Met Asn Arg Thr Arg Ile Ile Asp Ser | 100 | 105 | 110 |
| Lys Thr Glu Gln Pro Ala Ala Leu Ala Leu Asp Leu Val Asn Lys Leu | 115 | 120 | 125 |
| Val Tyr Trp Val Asp Leu Tyr Leu Asp Tyr Val Gly Val Val Asp Tyr | 130 | 135 | 140 |
| Gln Gly Lys Asn Arg His Ala Val Ile Gln Gly Arg Gln Val Arg His | 145 | 150 | 155 |
| Leu Tyr Gly Ile Thr Val Phe Glu Asp Tyr Leu Tyr Ala Thr Asn Ser | 165 | 170 | 175 |
| Asp Ser Tyr Asn Ile Val Arg Ile Ser Arg Phe Asn Gly Thr Asp Ile | 180 | 185 | 190 |
| His Ser Leu Ile Lys Ile Glu Asn Ala Trp Gly Ile Arg Ile Tyr Gln | 195 | 200 | 205 |
| Lys Arg Thr Gln Pro Thr Val Arg Ser His Ala Cys Glu Val Asp Pro | 210 | 215 | 220 |
| Tyr Gly Met Pro Gly Cys Ser His Ile Cys Leu Leu Ser Ser Ser | 225 | 230 | 235 |
| Tyr Thr Lys | 245 | 250 | 255 |
| | 259 | | |

<210> 968
 <211> 161
 <212>Amino acid
 <213> Homo sapiens

| | | | |
|---|-------|-----|-----|
| Ser Ser Gly Asn Pro Gln Pro Gly Asp Ser Ser Gly Gly Gly Ala Gly | <400> | 968 | |
| 1 | 5 | 10 | 15 |
| Gly Gly Leu Pro Ser Pro Gly Glu Gln Glu Leu Ser Arg Arg Leu Gln | 20 | 25 | 30 |
| Arg Leu Tyr Pro Ala Val Asn Gln Gln Glu Thr Pro Leu Pro Arg Ser | 35 | 40 | 45 |
| Trp Ser Pro Lys Asp Lys Tyr Asn Tyr Ile Gly Leu Ser Gln Gly Asn | 50 | 55 | 60 |
| Leu Arg Val His Tyr Lys Gly His Gly Lys Asn His Lys Asp Ala Ala | 65 | 70 | 75 |
| Ser Val Arg Ala Thr His Pro Ile Pro Ala Ala Cys Gly Ile Tyr Tyr | 85 | 90 | 95 |
| Phe Glu Val Lys Ile Val Ser Lys Gly Arg Asp Gly Tyr Met Gly Ile | 100 | 105 | 110 |
| Gly Leu Ser Ala Gln Gly Val Asn Met Asn Arg Leu Pro Gly Trp Asp | 115 | 120 | 125 |
| Lys His Ser Tyr Gly Tyr His Gly Asp Asp Gly His Ser Phe Cys Ser | 130 | 135 | 140 |
| Ser Gly Thr Gly Gln Pro Tyr Gly Pro Thr Phe Thr Thr Gly Asp Val | 145 | 150 | 155 |
| Ile | | | 160 |

161

<210> 969
 <211> 76
 <212>Amino acid
 <213> Homo sapiens

<400> 969
 Phe Phe Phe Lys Met Gly Ser Arg Ser Val Thr Gln Ala Gly Val
 1 5 10 15
 Gln Trp Cys Asp Val Ser Ser Leu Gln Ala Pro Pro Pro Arg Phe Thr
 20 25 30
 Leu Phe Cys Leu Ser Leu Pro Ser Ser Trp Asp Tyr Arg Cys Val Pro
 35 40 45
 Pro Cys Pro Ala Asn Phe Phe Val Phe Leu Val Glu Thr Gly Phe His
 50 55 60
 Arg Val Ser Gln Tyr Gly Leu Asp Leu Leu Thr Ser
 65 70 75 76

<210> 970
 <211> 267
 <212>Amino acid
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(267)
 <223> X = any amino acid or stop code

<400> 970
 Gln Leu Ser Leu Ala Arg Gly Lys Val Phe Leu Cys Ala Leu Ser Phe
 1 5 10 15
 Val Tyr Phe Ala Lys Ala Leu Ala Glu Gly Tyr Leu Lys Ser Thr Ile
 20 25 30
 Thr Gln Ile Glu Arg Arg Val Asp Ile Pro Ser Ser Leu Val Gly Val
 35 40 45
 Ile Asp Gly Ser Phe Glu Ile Gly Asn Leu Leu Val Ile Thr Phe Val
 50 55 60
 Ser Tyr Phe Gly Ala Lys Leu His Arg Pro Lys Ile Ile Gly Ala Gly
 65 70 75 80
 Cys Val Ile Met Gly Val Gly Thr Leu Leu Ile Ala Met Pro Gln Phe
 85 90 95
 Phe Met Glu Gln Tyr Lys Tyr Glu Arg Tyr Ser Pro Ser Ser Asn Ser
 100 105 110
 Thr Leu Ser Ile Ser Pro Cys Leu Leu Glu Ser Ser Gln Leu Pro
 115 120 125
 Val Ser Val Met Glu Lys Ser Lys Ser Lys Ile Ser Asn Glu Cys Glu
 130 135 140
 Val Asp Thr Ser Ser Ser Met Trp Ile Tyr Val Phe Leu Gly Asn Leu
 145 150 155 160
 Leu Arg Gly Ile Gly Glu Thr Pro Ile Gln Pro Leu Gly Ile Ala Tyr
 165 170 175
 Leu Asp Asp Phe Ala Ser Glu Asp Asn Ala Ala Phe Tyr Ile Gly Cys
 180 185 190

| | | |
|---|-----|-----|
| Val Gln Thr Val Ala Ile Ile Gly Pro Ile Phe Gly Phe Leu Leu Gly | | |
| 195 | 200 | 205 |
| Ser Leu Cys Ala Lys Leu Tyr Val Asp Ile Gly Phe Val Asn Leu Asp | | |
| 210 | 215 | 220 |
| His Phe Xaa Val Ser Ala Gln Leu Gly Thr Arg Lys Gly Val Leu Val | | |
| 225 | 230 | 235 |
| Cys Leu Val Phe Cys Leu Leu Cys Gln Ser Ile Gly Arg Arg Leu Ser | | |
| 245 | 250 | 255 |
| Glu Glu His His Ser Asp Arg Glu Lys Gly | | |
| 260 | 265 | 267 |

<210> 971
<211> 282
<212>Amino acid
<213> Homo sapiens

| | | |
|---|-----|-----|
| <400> 971 | | |
| Gln Pro Ala Gly Arg Val Glu Ala Phe Cys Lys Phe His Met Trp Ala | | |
| 1 | 5 | 10 |
| Glu Gly Met Thr Ser Leu Met Lys Ala Ala Leu Asp Leu Thr Tyr Pro | | |
| 20 | 25 | 30 |
| Ile Thr Ser Met Phe Ser Gly Ala Gly Phe Asn Ser Ser Ile Phe Ser | | |
| 35 | 40 | 45 |
| Val Phe Lys Asp Gln Gln Ile Glu Asp Leu Trp Ile Pro Tyr Phe Ala | | |
| 50 | 55 | 60 |
| Ile Thr Thr Asp Ile Thr Ala Ser Ala Met Arg Val His Thr Asp Gly | | |
| 65 | 70 | 75 |
| Ser Leu Trp Arg Tyr Val Arg Ala Ser Met Ser Leu Ser Gly Tyr Met | | |
| 85 | 90 | 95 |
| Pro Pro Leu Cys Asp Pro Lys Asp Gly His Leu Leu Met Asp Gly Gly | | |
| 100 | 105 | 110 |
| Tyr Ile Asn Asn Leu Pro Ala Asp Val Ala Arg Ser Met Gly Ala Lys | | |
| 115 | 120 | 125 |
| Val Val Ile Ala Ile Asp Val Gly Ser Arg Asp Glu Thr Asp Leu Thr | | |
| 130 | 135 | 140 |
| Asn Tyr Gly Asp Ala Leu Ser Gly Trp Leu Leu Trp Lys Arg Trp | | |
| 145 | 150 | 155 |
| Asn Pro Leu Ala Thr Lys Val Lys Val Leu Asn Met Ala Glu Ile Gln | | |
| 165 | 170 | 175 |
| Thr Arg Leu Ala Tyr Val Cys Cys Val Arg Gln Leu Glu Val Val Lys | | |
| 180 | 185 | 190 |
| Ser Ser Asp Tyr Cys Glu Tyr Leu Arg Pro Pro Ile Asp Ser Tyr Ser | | |
| 195 | 200 | 205 |
| Thr Leu Asp Phe Gly Lys Phe Asn Glu Ile Cys Glu Val Gly Tyr Gln | | |
| 210 | 215 | 220 |
| His Gly Arg Thr Val Phe Asp Ile Trp Gly Arg Ser Gly Val Leu Glu | | |
| 225 | 230 | 235 |
| Lys Met Leu Arg Asp Gln Gln Gly Pro Ser Lys Pro Ala Ser Ala | | |
| 245 | 250 | 255 |
| Val Leu Thr Cys Pro Asn Ala Ser Phe Thr Asp Leu Ala Glu Ile Val | | |
| 260 | 265 | 270 |
| Ser Arg Ile Glu Pro Ala Lys Pro Ala Met | | |
| 275 | 280 | 282 |

<210> 972
<211> 167
<212>Amino acid
<213> Homo sapiens

<400> 972

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Trp | Val | Ile | Met | Phe | Val | Ser | Tyr | Leu | Ile | Leu | Thr | Leu | Leu | His |
| 1 | | | | | 5 | | | | 10 | | | | 15 | | |
| Val | Gln | Thr | Ala | Val | Leu | Ala | Arg | Pro | Gly | Gly | Glu | Ser | Ile | Gly | Cys |
| | | | | | 20 | | | | 25 | | | | 30 | | |
| Asp | Asp | Tyr | Leu | Gly | Ser | Asp | Lys | Val | Val | Asp | Lys | Cys | Gly | Val | Cys |
| | | | | | 35 | | | | 40 | | | 45 | | | |
| Gly | Gly | Asp | Asn | Thr | Gly | Cys | Gln | Val | Val | Ser | Gly | Val | Phe | Lys | His |
| | | | | | 50 | | | | 55 | | | 60 | | | |
| Ala | Leu | Thr | Ser | Leu | Gly | Tyr | His | Arg | Val | Val | Glu | Ile | Pro | Glu | Gly |
| | | | | | 65 | | | | 70 | | | 75 | | | 80 |
| Ala | Thr | Lys | Ile | Asn | Ile | Thr | Glu | Met | Tyr | Lys | Ser | Asn | Asn | Tyr | Leu |
| | | | | | 85 | | | | 90 | | | 95 | | | |
| Ala | Leu | Arg | Ser | Arg | Gly | Arg | Ser | Ile | Ile | Asn | Gly | Asn | Trp | Ala | |
| | | | | | 100 | | | | 105 | | | 110 | | | |
| Ile | Asp | Arg | Pro | Gly | Lys | Tyr | Glu | Gly | Gly | Gly | Thr | Met | Phe | Thr | Tyr |
| | | | | | 115 | | | | 120 | | | 125 | | | |
| Lys | Arg | Pro | Asn | Glu | Ile | Ser | Ser | Thr | Ala | Gly | Glu | Ser | Phe | Leu | Ala |
| | | | | | 130 | | | | 135 | | | 140 | | | |
| Glu | Gly | Pro | Thr | Asn | Glu | Ile | Leu | Asp | Val | Tyr | Val | Ser | Leu | Asp | Val |
| | | | | | 145 | | | | 150 | | | 155 | | | 160 |
| Ser | Gly | Leu | Phe | Phe | Gly | Phe | | | | | | | | | |
| | | | | | 165 | | | | 167 | | | | | | |

<210> 973
<211> 140
<212>Amino acid
<213> Homo sapiens

<400> 973

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ile | Ser | Gly | Gly | Thr | Arg | Ser | Ala | Gly | Pro | Leu | Arg | Arg | Asn | Tyr | Asn |
| 1 | | | | | 5 | | | | 10 | | | 15 | | | |
| Phe | Ile | Ala | Ala | Val | Val | Glu | Lys | Val | Ala | Pro | Ser | Val | Val | His | Val |
| | | | | | 20 | | | | 25 | | | 30 | | | |
| Gln | Leu | Trp | Gly | Arg | Asn | Gln | Gln | Trp | Ile | Glu | Val | Val | Leu | Gln | Asn |
| | | | | | 35 | | | | 40 | | | 45 | | | |
| Gly | Ala | Arg | Tyr | Glu | Ala | Val | Val | Lys | Asp | Ile | Asp | Leu | Lys | Leu | Asp |
| | | | | | 50 | | | | 55 | | | 60 | | | |
| Leu | Ala | Val | Ile | Lys | Ile | Glu | Ser | Asn | Ala | Glu | Leu | Pro | Val | Leu | Met |
| | | | | | 65 | | | | 70 | | | 75 | | | 80 |
| Leu | Gly | Arg | Ser | Ser | Asp | Leu | Arg | Ala | Gly | Glu | Phe | Val | Val | Ala | Leu |
| | | | | | 85 | | | | 90 | | | 95 | | | |
| Gly | Ser | Pro | Phe | Ser | Leu | Gln | Asn | Thr | Ala | Gly | Ile | Val | Ser | | |
| | | | | | 100 | | | | 105 | | | 110 | | | |
| Thr | Lys | Gln | Arg | Gly | Gly | Lys | Glu | Leu | Gly | Met | Lys | Asp | Ser | Asp | Met |
| | | | | | 115 | | | | 120 | | | 125 | | | |
| Asp | Tyr | Val | Gln | Ile | Asp | Ala | Thr | Ile | Asn | Tyr | Gly | | | | |
| | | | | | 130 | | | | 135 | | | 140 | | | |

<210> 974
<211> 286
<212>Amino acid
<213> Homo sapiens

<400> 974
 Pro Arg Val Arg Glu Leu Lys Glu Ile Leu Asp Arg Lys Gly His Phe
 1 5 10 15
 Ser Glu Asn Glu Thr Arg Trp Ile Ile Gln Ser Leu Ala Ser Ala Ile
 20 25 30
 Ala Tyr Leu His Asn Asn Asp Ile Val His Arg Asp Leu Lys Leu Glu
 35 40 45
 Asn Ile Met Val Lys Ser Ser Leu Ile Asp Asp Asn Asn Glu Ile Asn
 50 55 60
 Leu Asn Ile Lys Val Thr Asp Phe Gly Leu Ala Val Lys Lys Gln Ser
 65 70 75 80
 Arg Ser Glu Ala Met Leu Gln Ala Thr Cys Gly Thr Pro Ile Tyr Met
 85 90 95
 Ala Pro Glu Val Ile Ser Ala His Asp Tyr Ser Gln Gln Cys Asp Ile
 100 105 110
 Trp Ser Ile Gly Val Val Met Tyr Met Leu Leu Arg Gly Glu Pro Pro
 115 120 125
 Phe Leu Ala Ser Ser Glu Glu Lys Leu Phe Glu Leu Ile Arg Lys Gly
 130 135 140
 Glu Leu His Phe Glu Asn Ala Val Trp Asn Ser Ile Ser Asp Cys Ala
 145 150 155 160
 Lys Ser Val Leu Lys Glu Leu Met Lys Val Asp Pro Ala His Arg Ile
 165 170 175
 Thr Ala Lys Glu Leu Leu Asp Asn Gln Trp Leu Thr Gly Asn Lys Leu
 180 185 190
 Ser Ser Val Arg Pro Thr Asn Val Leu Glu Met Met Lys Glu Trp Lys
 195 200 205
 Asn Asn Pro Glu Ser Val Glu Asn Thr Thr Glu Glu Lys Asn Lys
 210 215 220
 Pro Ser Thr Glu Glu Lys Leu Lys Ser Tyr Gln Pro Trp Gly Asn Val
 225 230 235 240
 Pro Glu Thr Asn Tyr Thr Ser Asp Glu Glu Glu Lys Gln Val Gly
 245 250 255
 Arg Ile Ile Ala Ala Phe Leu Pro Ser Val Lys Tyr Pro His His Thr
 260 265 270
 Trp Asn Ile Phe Leu Gln Ile Cys Leu Phe Val Val Ser Leu
 275 280 285 286

<210> 975
<211> 155
<212> Amino acid
<213> Homo sapiens

<400> 975
 Leu Ser Ile Ser Val Ser Asp Val Ser Leu Ser Asp Glu Gly Gln Tyr
 1 5 10 15
 Thr Cys Ser Leu Phe Thr Met Pro Val Lys Thr Ser Lys Ala Tyr Leu
 20 25 30
 Thr Val Leu Gly Val Pro Glu Lys Pro Gln Ile Ser Gly Phe Ser Ser
 35 40 45
 Pro Val Met Glu Gly Asp Leu Met Gln Leu Thr Cys Lys Thr Ser Gly
 50 55 60
 Ser Lys Pro Ala Ala Asp Ile Arg Trp Phe Lys Asn Asp Lys Glu Ile
 65 70 75 80

Lys Asp Val Lys Tyr Leu Lys Glu Glu Asp Ala Asn Arg Lys Thr Phe
 85 90 95
 Thr Val Ser Ser Thr Leu Asp Phe Arg Val Asp Arg Ser Asp Asp Gly
 100 105 110
 Val Ala Val Ile Cys Arg Val Asp His Glu Ser Leu Asn Ala Thr Pro
 115 120 125
 Gln Val Ala Met Gln Val Leu Glu Met His Tyr Thr Pro Ser Val Lys
 130 135 140
 Ile Ile Pro Ser Thr Pro Phe Pro Gln Glu Gly
 145 150 155

<210> 976
<211> 137
<212>Amino acid
<213> Homo sapiens

<400> 976
Tyr Asn Gln Lys Val Phe Ser Leu Gly Ile Ile Phe Phe Glu
 1 5 10 15
Met Ser Tyr His Pro Met Val Thr Ala Ser Glu Arg Ile Phe Val Leu
 20 25 30
Asn Gln Leu Arg Asp Pro Thr Ser Pro Lys Phe Pro Glu Asp Phe Asp
 35 40 45
Asp Gly Glu His Ala Lys Gln Lys Ser Val Ile Ser Trp Leu Leu Asn
 50 55 60
His Asp Pro Ala Lys Arg Pro Thr Ala Thr Glu Leu Leu Lys Ser Glu
 65 70 75 80
Leu Leu Pro Pro Gln Met Glu Glu Ser Glu Leu His Glu Val Leu
 85 90 95
His His Thr Leu Thr Asn Val Asp Gly Lys Ala Tyr Arg Thr Ile Asp
 100 105 110
Gly Pro Arg Ser Phe Arg Gln Arg Ile Ser Pro Ala Ile Ala Tyr Thr
 115 120 125
Tyr Asp Ser Asp Ile Leu Lys Gly Asn
 130 135 137

<210> 977
<211> 246
<212>Amino acid
<213> Homo sapiens

<400> 977
Asp Gln Asp Tyr Lys Tyr Asp Ser Thr Ser Asp Asp Ser Asn Phe Leu
 1 5 10 15
Asn Pro Pro Arg Gly Trp Asp His Thr Ala Pro Gly His Arg Thr Phe
 20 25 30
Glu Thr Lys Asp Gln Pro Glu Tyr Asp Ser Thr Asp Gly Glu Gly Asp
 35 40 45
Trp Ser Leu Trp Ser Val Cys Ser Val Thr Cys Gly Asn Gly Asn Gln
 50 55 60
Lys Arg Thr Arg Ser Cys Gly Tyr Ala Cys Thr Ala Thr Glu Ser Arg
 65 70 75 80
Thr Cys Asp Arg Pro Asn Cys Pro Gly Ile Glu Asp Thr Phe Arg Thr
 85 90 95

Ala Ala Thr Glu Val Ser Leu Leu Ala Gly Ser Glu Glu Phe Asn Ala
 100 105 110
 Thr Lys Leu Phe Glu Val Asp Thr Asp Ser Cys Glu Arg Trp Met Ser
 115 120 125
 Cys Lys Ser Glu Phe Leu Lys Lys Tyr Met His Lys Val Met Asn Asp
 130 135 140
 Leu Pro Ser Cys Pro Cys Ser Tyr Pro Thr Glu Val Ala Tyr Ser Thr
 145 150 155 160
 Ala Asp Ile Phe Asp Arg Ile Lys Arg Lys Asp Phe Arg Trp Lys Asp
 165 170 175
 Ala Ser Gly Pro Lys Glu Lys Leu Glu Ile Tyr Lys Pro Thr Ala Arg
 180 185 190
 Tyr Cys Ile Arg Ser Met Leu Ser Leu Glu Ser Thr Thr Leu Ala Ala
 195 200 205
 Gln His Cys Cys Tyr Gly Asp Asn Met Gln Leu Ile Thr Arg Gly Lys
 210 215 220
 Gly Ala Gly Thr Pro Asn Leu Ile Ser Thr Glu Phe Ser Ala Glu Leu
 225 230 235 240
 His Tyr Lys Val Asp Val
 245 246

<210> 978
 <211> 203
 <212>Amino acid
 <213> Homo sapiens

<400> 978
 Glu Ser Glu Glu Asn Gly Glu Ser Ala Met Asp Ser Thr Val Ala Lys
 1 5 10 15
 Glu Gly Thr Asn Val Pro Leu Val Ala Ala Gly Pro Cys Asp Asp Glu
 20 25 30
 Gly Ile Val Thr Ser Thr Gly Ala Lys Glu Glu Asp Glu Glu Gly Glu
 35 40 45
 Asp Val Val Thr Ser Thr Gly Arg Gly Asn Glu Ile Gly His Ala Ser
 50 55 60
 Thr Cys Thr Gly Leu Gly Glu Glu Ser Glu Gly Val Leu Ile Cys Glu
 65 70 75 80
 Ser Ala Glu Gly Asp Ser Gln Ile Gly Thr Val Val Glu His Val Glu
 85 90 95
 Ala Glu Ala Gly Ala Ile Met Asn Ala Asn Glu Asn Asn Val Asp
 100 105 110
 Ser Met Ser Gly Thr Glu Lys Gly Ser Lys Asp Thr Asp Ile Cys Ser
 115 120 125
 Ser Ala Lys Gly Ile Val Glu Ser Ser Val Thr Ser Ala Val Ser Gly
 130 135 140
 Lys Asp Glu Val Thr Pro Val Pro Gly Gly Cys Glu Gly Pro Met Thr
 145 150 155 160
 Ser Ala Ala Ser Asp Gln Ser Asp Ser Gln Leu Glu Lys Val Glu Asp
 165 170 175
 Thr Thr Ile Ser Thr Gly Leu Val Gly Gly Ser Tyr Asp Val Leu Val
 180 185 190
 Ser Gly Glu Val Pro Glu Cys Glu Val Ala His
 195 200 203

<210> 979
 <211> 94
 <212>Amino acid
 <213> Homo sapiens

<400> 979
 Val Cys Ile Ile Cys Leu Ile Phe Ser Tyr Tyr Ser Phe Asp Ser Ala
 1 5 10 15
 Leu Gln Ser Ala Lys Ser Ser Leu Gly Gly Asn Asp Glu Leu Ser Ala
 20 25 30
 Thr Phe Leu Glu Met Lys Gly His Phe Tyr Met Tyr Ala Gly Ser Leu
 35 40 45
 Leu Leu Lys Met Gly Glu His Gly Asn Asn Val Gln Trp Arg Ala Leu
 50 55 60
 Ser Glu Leu Ala Ala Leu Cys Tyr Leu Ile Ala Phe Gln Val Ser Leu
 65 70 75 80
 Pro Leu Gly Ala Ile Asp Ile Ser Arg Ser Leu Asp Val Phe
 85 90 94

<210> 980
<211> 226
<212>Amino acid
<213> Homo sapiens

<400> 980
 Gln His Pro Ser Gln Glu Lys Pro Gln Val Leu Thr Pro Ser Pro Arg
 1 5 10 15
 Lys Gln Lys Leu Asn Arg Lys Tyr Arg Ser His His Asp Gln Met Ile
 20 25 30
 Cys Lys Cys Leu Ser Leu Ser Ile Ser Tyr Ser Ala Thr Ile Gly Glu
 35 40 45
 Leu Thr Thr Ile Ile Gly Thr Ser Thr Ser Leu Ile Phe Leu Glu His
 50 55 60
 Phe Asn Asn Gln Tyr Pro Ala Ser Glu Val Val Asn Phe Gly Thr Trp
 65 70 75 80
 Phe Leu Phe Ser Phe Pro Ile Ser Leu Ile Met Leu Val Val Ser Trp
 85 90 95
 Phe Trp Met His Trp Leu Phe Leu Gly Cys Asn Phe Lys Glu Thr Cys
 100 105 110
 Ser Leu Ser Lys Lys Lys Thr Lys Arg Glu Gln Leu Ser Glu Lys
 115 120 125
 Arg Ile Gln Glu Glu Tyr Glu Lys Leu Gly Asp Ile Ser Tyr Pro Glu
 130 135 140
 Met Val Thr Gly Phe Phe Ile Leu Met Thr Val Leu Trp Phe Thr
 145 150 155 160
 Arg Glu Pro Gly Phe Val Pro Gly Trp Asp Ser Phe Phe Glu Lys Lys
 165 170 175
 Gly Tyr Arg Thr Asp Ala Thr Val Ser Val Phe Leu Gly Phe Leu Leu
 180 185 190
 Phe Leu Ile Pro Ala Lys Lys Pro Cys Phe Gly Lys Lys Asn Asp Gly
 195 200 205
 Glu Asn Gln Glu His Ser Leu Gly Thr Glu Pro Ile Ile Thr Trp Lys
 210 215 220
 Asp Phe
 225 226

<210> 981
<211> 163

<212>Amino acid
 <213> Homo sapiens

<400> 981
 Leu Glu Arg Glu Gly Asp Lys Gly Thr Pro Val Leu Arg Gly Phe Ser
 1 5 10 15
 Ser Val Ser Gly Ser Trp Ser Arg Arg Met Pro Pro Phe Leu Leu Leu
 20 25 30
 Thr Cys Leu Phe Ile Thr Gly Thr Ser Val Ser Pro Val Ala Leu Asp
 35 40 45
 Pro Cys Ser Ala Tyr Ile Ser Leu Asn Glu Pro Trp Arg Asn Thr Asp
 50 55 60
 His Gln Leu Asp Glu Ser Gln Gly Pro Pro Leu Cys Asp Asn His Val
 65 70 75 80
 Asn Gly Glu Trp Tyr His Phe Thr Gly Met Ala Gly Asp Ala Met Pro
 85 90 95
 Thr Phe Cys Ile Pro Glu Asn His Cys Gly Thr His Ala Pro Val Trp
 100 105 110
 Leu Asn Gly Ser His Pro Leu Glu Gly Asp Gly Ile Val Gln Arg Gln
 115 120 125
 Ala Cys Ala Ser Phe Asn Gly Asn Cys Cys Leu Trp Asn Thr Thr Val
 130 135 140
 Glu Val Lys Ala Cys Pro Gly Gly Tyr Tyr Val Tyr Arg Leu Thr Lys
 145 150 155 160
 Pro Ser Val
 163

<210> 982
 <211> 327
 <212>Amino acid
 <213> Homo sapiens

<400> 982
 Cys Gly Arg Thr Met Ser Asp Ile Arg His Ser Leu Leu Arg Arg Asp
 1 5 10 15
 Ala Leu Ser Ala Ala Lys Glu Val Leu Tyr His Leu Asp Ile Tyr Phe
 20 25 30
 Ser Ser Gln Leu Gln Ser Ala Pro Leu Pro Ile Val Asp Lys Gly Pro
 35 40 45
 Val Glu Leu Leu Glu Glu Phe Val Phe Gln Val Pro Lys Glu Arg Ser
 50 55 60
 Ala Gln Pro Lys Arg Leu Asn Ser Leu Gln Glu Leu Gln Leu Leu Glu
 65 70 75 80
 Ile Met Cys Asn Tyr Phe Gln Glu Gln Thr Lys Asp Ser Val Arg Gln
 85 90 95
 Ile Ile Phe Ser Ser Leu Phe Ser Pro Gln Gly Asn Lys Ala Asp Asp
 100 105 110
 Ser Arg Met Ser Leu Leu Gly Lys Leu Val Ser Met Ala Val Ala Val
 115 120 125
 Cys Arg Ile Pro Val Leu Glu Cys Ala Ala Ser Trp Leu Gln Arg Thr
 130 135 140
 Pro Val Val Tyr Cys Val Arg Leu Ala Lys Ala Leu Val Asp Asp Tyr
 145 150 155 160
 Cys Cys Leu Val Pro Gly Ser Ile Gln Thr Leu Lys Gln Ile Phe Ser
 165 170 175

| | | |
|---|-----|-----|
| Ala Ser Pro Arg Phe Cys Cys Gln Phe Ile Thr Ser Val Thr Ala Leu | | |
| 180 | 185 | 190 |
| Tyr Asp Leu Ser Ser Asp Asp Leu Ile Pro Pro Met Asp Leu Leu Glu | | |
| 195 | 200 | 205 |
| Met Ile Val Thr Trp Ile Phe Glu Asp Pro Arg Leu Ile Leu Ile Thr | | |
| 210 | 215 | 220 |
| Phe Leu Asn Thr Pro Ile Ala Ala Asn Leu Pro Ile Gly Phe Leu Glu | | |
| 225 | 230 | 235 |
| Leu Thr Pro Leu Val Gly Leu Ile Arg Trp Cys Val Lys Ala Pro Leu | | |
| 245 | 250 | 255 |
| Ala Tyr Lys Arg Lys Lys Pro Pro Leu Ser Asn Gly His Val Ser | | |
| 260 | 265 | 270 |
| Asn Lys Val Thr Lys Asp Pro Gly Val Gly Met Asp Arg Asp Ser His | | |
| 275 | 280 | 285 |
| Leu Leu Tyr Ser Lys Leu His Leu Ser Val Leu Gln Val Leu Met Thr | | |
| 290 | 295 | 300 |
| Leu Gln Leu His Leu Thr Glu Lys Asn Leu Tyr Gly Pro Pro Gly Ala | | |
| 305 | 310 | 315 |
| Asp Pro Leu Arg Pro His Gly | | |
| 325 | 327 | |

<210> 983
<211> 110
<212>Amino acid
<213> Homo sapiens

| | | |
|---|-----|-----|
| <400> 983 | | |
| Ser Ala Cys Ser Thr Gly Pro Glu Leu Pro Gly Arg Ala Thr Arg Ser | | |
| 1 | 5 | 10 |
| Leu Thr Arg Pro Ala Asn Gln Lys Gly Cys Asp Gly Asp Arg Leu Tyr | | |
| 20 | 25 | 30 |
| Tyr Asp Gly Cys Ala Met Ile Ala Met Asn Gly Ser Val Phe Ala Gln | | |
| 35 | 40 | 45 |
| Gly Ser Gln Phe Ser Leu Asp Asp Val Glu Val Leu Thr Ala Thr Leu | | |
| 50 | 55 | 60 |
| Asp Leu Glu Asp Val Arg Ser Tyr Arg Ala Glu Ile Ser Ser Arg Asn | | |
| 65 | 70 | 75 |
| Leu Ala Val Ser Ala Pro Val Asp Thr Cys Val Gly Cys Ser Ser Lys | | |
| 85 | 90 | 95 |
| Thr Trp Lys Val Ala Pro Phe Val Arg Ala Trp Trp Arg Pro | | |
| 100 | 105 | 110 |

<210> 984
<211> 80
<212>Amino acid
<213> Homo sapiens

| | | |
|---|----|----|
| <400> 984 | | |
| Ala Pro Leu Ser Arg Leu Cys Phe Pro Gln Val Leu Val Asn Glu Gly | | |
| 1 | 5 | 10 |
| Gly Gly Phe Asp Arg Ala Ser Gly Ser Phe Val Ala Pro Val Arg Gly | | |
| 20 | 25 | 30 |
| Val Tyr Ser Phe Arg Phe His Val Val Lys Val Tyr Asn Arg Gln Thr | | |
| 35 | 40 | 45 |

| | | |
|---|----|----|
| Val Gln Val Thr Ser Ala Leu Ala Pro Ile Pro Gly Ser Gly Gly Trp | | |
| 50 | 55 | 60 |
| Gly Gly Gly Arg Arg Gly Ala Gln Leu Thr Ser Gly Trp Thr Leu His | | |
| 65 | 70 | 75 |
| | | 80 |

<210> 985
<211> 235
<212>Amino acid
<213> Homo sapiens

| | | |
|---|-----|-----|
| <400> 985 | | |
| Pro His Ile Ile Gly Ala Glu Asp Asp Asp Phe Gly Thr Glu His Glu | | |
| 1 | 5 | 10 |
| Gln Ile Asn Gly Gln Cys Ser Cys Phe Gln Ser Ile Glu Leu Leu Lys | | |
| 20 | 25 | 30 |
| Ser Arg Pro Ala His Leu Ala Val Phe Leu Arg His Val Val Ser Gln | | |
| 35 | 40 | 45 |
| Phe Asp Pro Ala Thr Leu Leu Cys Tyr Leu Tyr Ser Asp Leu Tyr Lys | | |
| 50 | 55 | 60 |
| His Thr Asn Ser Lys Glu Thr Arg Arg Ile Phe Leu Glu Phe His Gln | | |
| 65 | 70 | 75 |
| Phe Phe Leu Asp Arg Ser Ala His Leu Lys Val Ser Val Pro Asp Glu | | |
| 85 | 90 | 95 |
| Met Ser Ala Asp Leu Glu Lys Arg Arg Pro Glu Leu Ile Pro Glu Asp | | |
| 100 | 105 | 110 |
| Leu His Arg His Tyr Ile Gln Thr Met Gln Glu Arg Val His Pro Glu | | |
| 115 | 120 | 125 |
| Val Gln Arg His Leu Glu Asp Phe Arg Gln Lys Arg Ser Met Gly Leu | | |
| 130 | 135 | 140 |
| Thr Leu Ala Glu Ser Glu Leu Thr Lys Leu Asp Ala Glu Arg Asp Lys | | |
| 145 | 150 | 155 |
| Asp Arg Leu Thr Leu Glu Lys Glu Arg Thr Cys Ala Glu Gln Ile Val | | |
| 165 | 170 | 175 |
| Ala Lys Ile Glu Glu Val Leu Met Thr Ala Gln Ala Val Glu Glu Asp | | |
| 180 | 185 | 190 |
| Lys Ser Ser Thr Met Gln Tyr Val Ile Leu Met Tyr Met Lys His Leu | | |
| 195 | 200 | 205 |
| Gly Val Lys Val Lys Glu Pro Arg Asn Leu Glu His Lys Arg Gly Arg | | |
| 210 | 215 | 220 |
| Ile Gly Phe Leu Pro Lys Ile Lys Gln Ser Met | | |
| 225 | 230 | 235 |

<210> 986
<211> 140
<212>Amino acid
<213> Homo sapiens

| | | |
|---|----|----|
| <400> 986 | | |
| Ser Pro Gly Thr Gly Arg Gly Pro Gly Pro Thr Ser Phe Val Cys Leu | | |
| 1 | 5 | 10 |
| Pro Thr Pro Gln Cys Pro Phe Ile Asp Asp Phe Ile Leu Ala Leu His | | |
| 20 | 25 | 30 |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Arg | Lys | Ile | Lys | Asn | Glu | Pro | Val | Val | Phe | Pro | Glu | Gly | Pro | Glu | Ile |
| 35 | | | | | 40 | | | | | | 45 | | | | |
| Ser | Glu | Glu | Leu | Lys | Asp | Leu | Ile | Leu | Lys | Met | Leu | Asp | Lys | Asn | Pro |
| 50 | | | | | 55 | | | | | 60 | | | | | |
| Glu | Thr | Arg | Ile | Gly | Val | Pro | Asp | Ile | Lys | Leu | His | Pro | Trp | Val | Thr |
| 65 | | | | | 70 | | | | | 75 | | | | 80 | |
| Lys | Asn | Gly | Glu | Glu | Pro | Leu | Pro | Ser | Glu | Glu | Glu | His | Cys | Ser | Val |
| 85 | | | | | 90 | | | | | 95 | | | | | |
| Val | Glu | Val | Thr | Glu | Glu | Glu | Val | Lys | Asn | Ser | Val | Arg | Leu | Ile | Pro |
| 100 | | | | | 105 | | | | | 110 | | | | | |
| Ser | Trp | Thr | Thr | Val | Ile | Leu | Val | Lys | Ser | Met | Leu | Arg | Lys | Arg | Ser |
| 115 | | | | | 120 | | | | | 125 | | | | | |
| Phe | Gly | Asn | Pro | Phe | Glu | Pro | Gln | Ala | Arg | Met | Ala | | | | |
| 130 | | | | | 135 | | | | | 140 | | | | | |

<210> 987
<211> 242
<212>Amino acid
<213> Homo sapiens

| | | | | | | | | | | | | | | | |
|-----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <400> 987 | | | | | | | | | | | | | | | |
| His | Ala | Ser | Gly | Ile | Lys | Ile | Asp | Lys | Thr | Ser | Asp | Gly | Pro | Lys | Leu |
| 1 | | | | 5 | | | | | 10 | | | | 15 | | |
| Phe | Leu | Thr | Glu | Glu | Asp | Gln | Lys | Lys | Leu | His | Asp | Phe | Glu | Gln | |
| | | | | | | | 20 | | 25 | | | | 30 | | |
| Cys | Val | Glu | Met | Tyr | Phe | Asn | Glu | Lys | Asp | Asp | Lys | Phe | His | Ser | Gly |
| | | | | 35 | | | 40 | | | | 45 | | | | |
| Ser | Glu | Glu | Arg | Ile | Arg | Val | Thr | Phe | Glu | Arg | Val | Glu | Gln | Met | Cys |
| | | | | 50 | | | 55 | | | | 60 | | | | |
| Ile | Gln | Ile | Lys | Glu | Val | Gly | Asp | Arg | Val | Asn | Tyr | Ile | Lys | Arg | Ser |
| | | | | 65 | | 70 | | | | 75 | | | | 80 | |
| Leu | Gln | Ser | Leu | Asp | Ser | Gln | Ile | Gly | His | Leu | Gln | Asp | Leu | Ser | Ala |
| | | | | 85 | | | 90 | | | | 95 | | | | |
| Leu | Thr | Val | Asp | Thr | Leu | Lys | Thr | Leu | Thr | Ala | Gln | Lys | Ala | Ser | Glu |
| | | | | 100 | | | 105 | | | | 110 | | | | |
| Ala | Ser | Lys | Val | His | Asn | Glu | Ile | Thr | Arg | Glu | Leu | Ser | Ile | Ser | Lys |
| | | | | 115 | | | 120 | | | | 125 | | | | |
| His | Leu | Ala | Gln | Asn | Leu | Ile | Asp | Asp | Gly | Pro | Val | Arg | Pro | Ser | Val |
| | | | | 130 | | | 135 | | | | 140 | | | | |
| Trp | Lys | lys | His | Gly | Val | Val | Asn | Thr | Leu | Ser | Ser | Ser | Leu | Pro | Gln |
| | | | | 145 | | | 150 | | | | 155 | | | 160 | |
| Gly | Asp | Asp | Leu | Glu | Ser | Asn | Asn | Pro | Phe | His | Cys | Asn | Ile | Leu | Met |
| | | | | 165 | | | | 170 | | | 175 | | | | |
| Asp | Asp | Lys | Asp | Pro | Gln | Cys | Asn | Ile | Phe | Gly | Gln | Asp | Leu | Pro | Ala |
| | | | | 180 | | | 185 | | | | 190 | | | | |
| Val | Pro | Gln | Arg | Lys | Glu | Phe | Asn | Asn | Phe | Pro | Glu | Ala | Gly | Ser | Ser |
| | | | | 195 | | | 200 | | | | 205 | | | | |
| Gly | Ala | Leu | Phe | Pro | Ser | Ala | Val | Ser | Pro | Pro | Glu | Leu | Arg | Gln | Arg |
| | | | | 210 | | | 215 | | | | 220 | | | | |
| Leu | His | Gly | Val | Glu | Leu | Leu | Lys | Ile | Phe | Asn | Lys | Lys | Gln | Lys | Lys |
| | | | | 225 | | | 230 | | | | 235 | | | 240 | |
| Arg | Ala | | | 242 | | | | | | | | | | | |

<210> 988
<211> 154
<212>Amino acid
<213> Homo sapiens

<400> 988

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Cys | Cys | Arg | Trp | Ile | Asp | Cys | Phe | Ala | Leu | Tyr | Asp | Gln | Gln | Glu | Glu |
| 1 | | | | 5 | | | | | 10 | | | 15 | | | |
| Leu | Val | Arg | His | Ile | Glu | Lys | Val | His | Ile | Asp | Gln | Arg | Lys | Gly | Glu |
| | | | | 20 | | | | | 25 | | | 30 | | | |
| Asp | Phe | Thr | Cys | Phe | Trp | Ala | Gly | Cys | Pro | Arg | Arg | Tyr | Lys | Pro | Phe |
| | | | | 35 | | | | | 40 | | | 45 | | | |
| Asn | Ala | Arg | Tyr | Lys | Leu | Leu | Ile | His | Met | Arg | Val | His | Ser | Gly | Glu |
| | | | | 50 | | | | | 55 | | | 60 | | | |
| Lys | Pro | Asn | Lys | Cys | Thr | Phe | Glu | Gly | Cys | Glu | Ala | Phe | Ser | Arg | |
| | | | | 65 | | | | | 70 | | | 75 | | | 80 |
| Leu | Glu | Asn | Leu | Lys | Ile | His | Leu | Arg | Ser | His | Thr | Gly | Glu | Lys | Pro |
| | | | | 85 | | | | | 90 | | | 95 | | | |
| Tyr | Leu | Cys | Gln | His | Pro | Gly | Cys | Gln | Lys | Ala | Phe | Ser | Asn | Ser | Ser |
| | | | | 100 | | | | | 105 | | | 110 | | | |
| Asp | Arg | Ala | Lys | His | Gln | Arg | Thr | His | Ile | Asp | Thr | Lys | Pro | Tyr | Ala |
| | | | | 115 | | | | | 120 | | | 125 | | | |
| Cys | Gln | Ile | Pro | Gly | Cys | Thr | Lys | Arg | Tyr | Thr | Asp | Pro | Ser | Ser | Leu |
| | | | | 130 | | | | | 135 | | | 140 | | | |
| Arg | Lys | His | Val | Lys | Ala | His | Ser | Ser | Lys | | | | | | |
| | | | | 145 | | | | | 150 | | | 154 | | | |

<210> 989

<211> 65
<212>Amino acid
<213> Homo sapiens

<400> 989

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Pro | Leu | Leu | Trp | Thr | Leu | Ser | Asp | Phe | Gly | Gly | Thr | Met | Asp | Gln |
| 1 | | | | 5 | | | | | 10 | | | 15 | | | |
| Ser | Gly | Met | Glu | Ile | Pro | Val | Thr | Leu | Ile | Ile | Lys | Ala | Pro | Asn | Gln |
| | | | | 20 | | | | | 25 | | | 30 | | | |
| Lys | Tyr | Ser | Asp | Gln | Thr | Ile | Ser | Cys | Phe | Leu | Asn | Trp | Thr | Val | Gly |
| | | | | 35 | | | | | 40 | | | 45 | | | |
| Lys | Leu | Lys | Thr | His | Leu | Ser | Asn | Val | Tyr | Pro | Ser | Lys | Pro | Val | Ser |
| | | | | 50 | | | | | 55 | | | 60 | | | |
| Val | | | | | | | | | | | | | | | |
| | 65 | | | | | | | | | | | | | | |

<210> 990

<211> 297
<212>Amino acid
<213> Homo sapiens

<400> 990

| | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ala | Gly | Thr | Arg | Met | Cys | Val | Val | Ala | Ala | Ala | Glu | Glu | Leu | Val | Cys | |
| 1 | | | | 5 | | | | | 10 | | | 15 | | | | |
| Gly | Ala | Ala | Arg | Gly | Ile | Leu | Trp | Met | Arg | Arg | Thr | Arg | Arg | Pro | Phe | Val |
| | | | | 20 | | | | | 25 | | | 30 | | | | |

Leu Met Asn Lys Met Asp Asp Leu Asn Leu His Tyr Arg Phe Leu Asn
 35 40 45
 Trp Arg Arg Arg Ile Arg Glu Ile Arg Glu Val Arg Ala Phe Arg Tyr
 50 55 60
 Gln Glu Arg Phe Lys His Ile Leu Val Asp Gly Asp Thr Leu Ser Tyr
 65 70 75 80
 His Gly Asn Ser Gly Glu Val Gly Cys Tyr Val Ala Ser Arg Pro Leu
 85 90 95
 Thr Lys Asp Ser Asn Tyr Phe Glu Val Ser Ile Val Asp Ser Gly Val
 100 105 110
 Arg Gly Thr Ile Ala Val Gly Leu Val Pro Gln Tyr Tyr Ser Leu Asp
 115 120 125
 His Gln Pro Gly Trp Leu Pro Asp Ser Val Ala Tyr His Ala Asp Asp
 130 135 140
 Gly Lys Leu Tyr Asn Gly Arg Ala Lys Gly Arg Gln Phe Gly Ser Lys
 145 150 155 160
 Cys Asn Ser Gly Asp Arg Ile Gly Cys Gly Ile Glu Pro Val Ser Phe
 165 170 175
 Asp Val Gln Thr Ala Gln Ile Phe Phe Thr Lys Asn Gly Lys Arg Val
 180 185 190
 Gly Ser Thr Ile Met Pro Met Ser Pro Asp Gly Leu Phe Pro Ala Val
 195 200 205
 Gly Met His Ser Leu Gly Glu Val Arg Leu His Leu Asn Ala Glu
 210 215 220
 Leu Gly Arg Glu Asp Asp Ser Val Met Met Val Asp Ser Tyr Glu Asp
 225 230 235 240
 Glu Trp Gly Arg Leu His Asp Val Arg Val Cys Gly Thr Leu Leu Glu
 245 250 255
 Tyr Leu Gly Lys Ser Ile Val Asp Val Gly Leu Ala Gln Ala
 260 265 270
 Arg His Pro Leu Ser Thr Arg Ser His Tyr Phe Glu Val Glu Ile Val
 275 280 285
 Asp Pro Gly Glu Lys Cys Tyr Ile Ala
 290 295 297

<210> 991
 <211> 207
 <212>Amino acid
 <213> Homo sapiens

<400> 991
 Gln Gln Ala Glu Glu His Leu Ala Ala Tyr Ser Val Ser Asp Ser Asp
 1 5 10 15
 Ser Gly Lys Asp Pro Ser Met Glu Cys Cys Arg Arg Ala Thr Pro Gly
 20 25 30
 Thr Leu Leu Leu Phe Leu Ala Phe Leu Leu Leu Ser Ser Arg Thr Ala
 35 40 45
 Arg Ser Glu Glu Asp Arg Asp Gly Leu Trp Asp Ala Trp Gly Pro Trp
 50 55 60
 Ser Glu Cys Ser Arg Thr Cys Gly Gly Gly Ala Ser Tyr Ser Leu Arg
 65 70 75 80
 Arg Cys Leu Ser Ser Lys Ser Cys Glu Gly Arg Asn Ile Arg Tyr Arg
 85 90 95
 Thr Cys Ser Asn Val Asp Cys Pro Pro Glu Ala Gly Asp Phe Arg Ala
 100 105 110
 Gln Gln Cys Ser Ala His Asn Asp Val Lys His His Gly Gln Phe Tyr
 115 120 125
 Glu Trp Leu Pro Val Ser Asn Asp Pro Asp Asn Pro Cys Ser Leu Lys
 130 135 140

Cys Gln Ala Lys Gly Thr Thr Leu Val Val Glu Leu Ala Pro Lys Val
 145 150 155 160
 Leu Asp Gly Thr Arg Cys Tyr Thr Glu Ser Leu Asp Met Cys Ile Ser
 165 170 175
 Gly Leu Cys Gln Val Ser Ala Asp Leu Phe Ser Phe Asn Leu Ser Arg
 180 185 190
 Gly Phe Cln Cys Leu Cys Val Asn Gly Leu His Ser Leu Thr Leu
 195 200 205 207

<210> 992
 <211> 184
 <212>Amino acid
 <213> Homo sapiens

<400> 992
 Arg Leu Leu Arg Gln Glu Leu Val Val Leu Cys His Leu His His Pro
 1 5 10 15
 Ser Leu Ile Ser Leu Leu Ala Ala Gly Ile Arg Pro Arg Met Leu Val
 20 25 30
 Met Glu Leu Ala Ser Lys Gly Ser Leu Asp Arg Leu Leu Gln Gln Asp
 35 40 45
 Lys Ala Ser Leu Thr Arg Thr Leu Gln His Arg Ile Ala Leu His Val
 50 55 60
 Ala Asp Gly Leu Arg Tyr Leu His Ser Ala Met Ile Ile Tyr Arg Asp
 65 70 75 80
 Leu Lys Pro His Asn Val Leu Leu Phe Thr Leu Tyr Pro Asn Ala Ala
 85 90 95
 Ile Ile Ala Lys Ile Ala Asp Tyr Gly Ile Ala Gln Tyr Cys Cys Arg
 100 105 110
 Met Gly Ile Lys Thr Ser Glu Gly Thr Pro Gly Phe Arg Ala Pro Glu
 115 120 125
 Val Ala Arg Gly Asn Val Ile Tyr Asn Gln Gln Ala Asp Val Tyr Ser
 130 135 140
 Phe Gly Leu Leu Leu Tyr Asp Ile Leu Thr Thr Gly Gly Arg Ile Val
 145 150 155 160
 Glu Gly Leu Lys Phe Pro Asn Glu Phe Asp Glu Leu Glu Ile Gln Gly
 165 170 175
 Lys Leu Pro Asp Pro Val Lys Glu
 180 184

<210> 993
 <211> 144
 <212>Amino acid
 <213> Homo sapiens

<400> 993
 Lys Ala Ser Asn Ser Thr His Glu Phe Arg Ile Gly Leu Pro Glu Gly
 1 5 10 15
 Trp Glu Ser Glu Lys Lys Ala Val Ile Pro Leu Gly Ile Gly Pro Pro
 20 25 30
 Leu Thr Leu Ile Cys Leu Gly Val Leu Gly Gly Ile Leu Ile Tyr Gly
 35 40 45
 Arg Lys Gly Phe Gln Thr Ala His Phe Tyr Leu Lys Asp Ser Pro Ser
 50 55 60

| | | | |
|---|-----|-----|-----|
| Pro Lys Val Ile Ser Thr Pro Pro Pro Ile Phe Pro Ile Ser Lys | | | |
| 65 | 70 | 75 | 80 |
| Glu Val Gly Pro Ile Pro Ile Lys His Phe Pro Lys His Val Ala Asn | | | |
| 85 | 90 | 95 | |
| Leu His Ala Ser Arg Gly Phe Thr Glu Lys Phe Glu Thr Leu Lys Lys | | | |
| 100 | 105 | 110 | |
| Phe Tyr Gln Glu Gly Gln Ser Cys Thr Val Asp Leu Gly Ile Thr Ala | | | |
| 115 | 120 | 125 | |
| Asn Ser Ser Asn His Pro Asp Asn Arg His Arg Asn Arg Ser Leu Ile | | | |
| 130 | 135 | 140 | 144 |

<210> 994
<211> 147
<212>Amino acid
<213> Homo sapiens

| | | | |
|---|-----|-----|----|
| <400> 994 | | | |
| Ser Phe Pro Asp Arg Thr Ala Ser Leu Val Leu Ser Val Pro Val | | | |
| 1 | 5 | 10 | 15 |
| Gly Gln Ala Gly Met Gln Gln Arg Gly Leu Ala Ile Val Ala Leu Ala | | | |
| 20 | 25 | 30 | |
| Val Cys Ala Ala Leu His Ala Ser Pro Ala Ile Leu Pro Ile Ala Ser | | | |
| 35 | 40 | 45 | |
| Ser Cys Cys Thr Glu Val Ser His His Ile Ser Arg Arg Leu Leu Glu | | | |
| 50 | 55 | 60 | |
| Arg Val Asn Met Cys Arg Ile Gln Arg Ala Asp Gly Asp Cys Asp Leu | | | |
| 65 | 70 | 75 | 80 |
| Ala Ala Val Ile Leu His Val Lys Arg Arg Arg Ile Cys Val Ser Pro | | | |
| 85 | 90 | 95 | |
| His Asn His Thr Val Lys Gln Trp Met Lys Val Gln Ala Ala Lys Lys | | | |
| 100 | 105 | 110 | |
| Asn Gly Lys Gly Asn Val Cys His Arg Lys Lys His His Gly Lys Arg | | | |
| 115 | 120 | 125 | |
| Asn Ser Asn Arg Ala His Gln Gly Lys His Glu Thr Tyr Gly His Lys | | | |
| 130 | 135 | 140 | |
| Thr Pro Tyr | | | |
| 145 | 147 | | |

<210> 995
<211> 245
<212>Amino acid
<213> Homo sapiens

| | | | |
|---|----|----|----|
| <400> 995 | | | |
| Phe Glu Gln Pro Gly Asn Pro Gly Asp Pro Arg Val Arg Thr Pro Pro | | | |
| 1 | 5 | 10 | 15 |
| Pro Trp Gly Pro His Phe Ala Leu Ile Pro Ser Ser Pro Lys Glu | | | |
| 20 | 25 | 30 | |
| Val Pro Ala Thr Pro Ser Ser Arg Arg Asp Pro Ile Ala Pro Thr Ala | | | |
| 35 | 40 | 45 | |
| Thr Leu Leu Ser Lys Lys Thr Pro Ala Thr Leu Ala Pro Lys Glu Ala | | | |
| 50 | 55 | 60 | |

Leu Ile Pro Pro Ala Met Thr Val Pro Ser Pro Lys Lys Thr Pro Ala
 65 70 75 80
 Ile Pro Thr Pro Lys Glu Ala Pro Ala Thr Pro Ser Ser Lys Glu Ala
 85 90 95
 Ser Ser Pro Pro Ala Val Thr Pro Ser Thr Tyr Lys Gly Ala Pro Ser
 100 105 110
 Pro Lys Glu Leu Leu Ile Pro Pro Ala Val Thr Ser Pro Ser Pro Lys
 115 120 125
 Glu Ala Pro Thr Pro Pro Ala Val Thr Pro Pro Ser Pro Glu Lys Gly
 130 135 140
 Pro Ala Thr Pro Ala Pro Lys Gly Thr Pro Thr Ser Pro Pro Val Thr
 145 150 155 160
 Pro Ser Ser Leu Lys Asp Ser Pro Thr Ser Pro Ala Ser Val Thr Cys
 165 170 175
 Lys Met Gly Ala Thr Val Pro Gln Ala Ser Lys Gly Leu Pro Ala Lys
 180 185 190
 Lys Gly Pro Thr Ala Leu Lys Glu Val Leu Val Ala Pro Ala Pro Glu
 195 200 205
 Ser Thr Pro Ile Ile Thr Ala Pro Thr Arg Lys Gly Pro Gln Thr Lys
 210 215 220
 Lys Ser Ser Ala Thr Ser Pro Pro Ile Cys Pro Asp Pro Ser Ala Lys
 225 230 235 240
 Asn Gly Ser Lys Gly
 245

<210> 996
 <211> 25
 <212>Amino acid
 <213> Homo sapiens

<400> 996
 Phe Phe Leu Lys Ile Gln Gly Leu Gly Trp Ala Arg Trp Leu Thr Pro
 1 5 10 15
 Val Ile Pro Val Leu Trp Glu Ala Glu
 20 25

<210> 997
 <211> 56
 <212>Amino acid
 <213> Homo sapiens

<400> 997
 Ala Gly Phe Gly Tyr Gly Leu Pro Ile Ser Arg Leu Tyr Ala Lys Tyr
 1 5 10 15
 Phe Gln Gly Asp Leu Asn Leu Tyr Ser Leu Ser Gly Tyr Gly Thr Asp
 20 25 30
 Ala Ile Ile Tyr Leu Lys Val Ser Leu Glu Phe Asn Ser Lys Ile Leu
 35 40 45
 Phe Leu Lys Pro Leu Leu Leu
 50 55 56

<210> 998
 <211> 198

<212>Amino acid
 <213> Homo sapiens

<400> 998
 Trp Met Arg Ala Pro Met Leu Gln Gln Gln Ala Pro Arg Met Asp
 1 5 10 15
 Thr Pro Pro Pro Glu Glu Arg Leu Glu Lys Gln Asn Glu Lys Leu Asn
 20 25 30
 Asn Gln Glu Glu Glu Thr Glu Phe Lys Glu Leu Asp Gly Leu Arg Glu
 35 40 45
 Ala Leu Ala Asn Leu Arg Gly Leu Ser Glu Glu Glu Arg Ser Glu Lys
 50 55 60
 Ala Met Leu Arg Ser Arg Ile Glu Glu Gln Ser Gln Leu Ile Cys Ile
 65 70 75 80
 Leu Lys Arg Arg Ser Asp Glu Ala Leu Glu Arg Cys Gln Ile Leu Glu
 85 90 95
 Leu Leu Asn Ala Glu Leu Glu Lys Met Met Gln Glu Ala Glu Lys
 100 105 110
 Leu Lys Ala Gln Gly Glu Tyr Ser Arg Lys Leu Glu Glu Arg Phe Met
 115 120 125
 Thr Leu Ala Ala Asn His Glu Leu Met Leu Arg Phe Lys Asp Glu Tyr
 130 135 140
 Lys Ser Glu Asn Ile Lys Leu Arg Glu Glu Asn Glu Lys Leu Arg Leu
 145 150 155 160
 Glu Asn Asn Ser Leu Phe Ser Gln Ala Leu Lys Asp Glu Glu Ala Lys
 165 170 175
 Val Leu Gln Leu Thr Val Arg Cys Glu Ala Leu Thr Gly Glu Leu Glu
 180 185 190
 Thr Leu Lys Glu Arg Cys
 195 198

<210> 999
 <211> 79
 <212>Amino acid
 <213> Homo sapiens

<400> 999
 Asp Pro Gly Ala Ser His Ala Ser Val Gln Val Gln Val Leu Lys Glu
 1 5 10 15
 Gln Leu Phe Ala Gly Arg Met Pro Ser Pro Phe Arg Ser Cys Ala Leu
 20 25 30
 Met Gly Met Cys Gly Ser Arg Ser Ala Asp Asn Leu Ser Cys Pro Ser
 35 40 45
 Pro Leu Asn Val Met Glu Pro Val Ser Phe Phe Pro Leu Lys Ser Leu
 50 55 60
 Gly Lys Gly Met Ile Gln His Phe Arg His Ile Val Ser Leu Val
 65 70 75 79

<210> 1000
 <211> 206
 <212>Amino acid
 <213> Homo sapiens

<400> 1000
 Val Thr Thr Thr His Ser Val Gly Arg Gly His Glu Leu Gln Leu
 1 5 10 15
 Leu Asn Glu Glu Leu Arg Asn Ile Glu Leu Glu Cys Gln Asn Ile Met
 20 25 30
 Gln Ala His Arg Leu Gln Lys Val Thr Asp Gln Tyr Gly Asp Ile Trp
 35 40 45
 Thr Leu His Asp Gly Gly Phe Arg Asn Tyr Asn Thr Ser Ile Asp Met
 50 55 60
 Gln Arg Gly Lys Leu Asp Asp Ile Met Glu His Pro Glu Lys Ser Asp
 65 70 75 80
 Lys Asp Ser Ser Ala Tyr Asn Thr Ala Glu Ser Cys Arg Ser Thr
 85 90 95
 Pro Leu Thr Val Asp Arg Ser Pro Asp Ser Ser Leu Pro Arg Val Ile
 100 105 110
 Asn Leu Thr Asn Lys Lys Asn Leu Arg Ser Thr Met Ala Ala Thr Gln
 115 120 125
 Ser Ser Ser Gly Gln Ser Ser Lys Glu Ser Thr Ser Thr Lys Ala Lys
 130 135 140
 Thr Thr Glu Gln Gly Cys Ser Ala Glu Ser Lys Glu Lys Val Leu Glu
 145 150 155 160
 Gly Ser Lys Leu Pro Asp Gln Glu Lys Ala Val Ser Glu His Ile Pro
 165 170 175
 Tyr Leu Ser Pro Tyr His Ser Ser Ser Tyr Arg Tyr Ala Asn Ile Pro
 180 185 190
 Ala His Ala Arg His Tyr Gln Ser Tyr Met Gln Leu Ile Gln
 195 200 205 206

<210> 1001
<211> 138
<212>Amino acid
<213> Homo sapiens

<400> 1001
 Val Trp Gly Cys Leu Ala Thr Val Ser Thr His Lys Lys Ile Gln Gly
 1 5 10 15
 Leu Pro Phe Gly Asn Cys Leu Pro Val Ser Asp Gly Pro Phe Asn Asn
 20 25 30
 Ser Thr Gly Ile Pro Phe Phe Tyr Met Thr Ala Lys Asp Pro Val Val
 35 40 45
 Ala Asp Leu Met Lys Asn Pro Met Ala Ser Leu Met Leu Pro Glu Ser
 50 55 60
 Glu GLY Glu Phe Cys Arg Lys Asn Ile Val Asp Pro Glu Asp Pro Arg
 65 70 75 80
 Cys Val Gln Leu Thr Leu Thr Gly Gln Met Ile Ala Val Ser Pro Glu
 85 90 95
 Glu Val Glu Phe Ala Lys Gln Ala Met Phe Ser Arg His Pro Gly Met
 100 105 110
 Arg Lys Trp Pro Arg Gln Tyr Glu Trp Phe Phe Met Lys Met Arg Ile
 115 120 125
 Glu His Ile Trp Leu Gln Lys Trp Tyr Gly
 130 135 138

<210> 1002
<211> 133

<212>Amino acid
 <213> Homo sapiens

<400> 1002
 Gln Ala Ala Asn Met Ala Val Ala Arg Val Asp Ala Ala Leu Pro Pro
 1 5 10 15
 Gly Glu Gly Ser Val Val Asn Trp Ser Gly Gln Gly Leu Gln Lys Leu
 20 25 30
 Gly Pro Asn Leu Pro Cys Glu Ala Asp Ile His Thr Leu Ile Leu Asp
 35 40 45
 Lys Asn Gln Ile Ile Lys Leu Glu Asn Leu Glu Lys Cys Lys Arg Leu
 50 55 60
 Ile Gln Leu Ser Val Ala Asn Asn Arg Leu Val Arg Met Met Gly Val
 65 70 75 80
 Ala Lys Leu Thr Leu Leu Arg Val Leu Asn Leu Pro His Asn Ser Ile
 85 90 95
 Gly Cys Val Glu Gly Leu Lys Glu Leu Val His Leu Glu Trp Leu Asn
 100 105 110
 Leu Ala Gly Asn Asn Leu Ile Ala Met Gln Ile Asn Ser Cys Thr
 115 120 125
 Ala Leu Gln His Leu
 130 133

<210> 1003
 <211> 276
 <212>Amino acid
 <213> Homo sapiens

<400> 1003
 Phe Arg Ala Ala Val Gly Ala Val Pro Glu Gly Ala Trp Lys Asp Thr
 1 5 10 15
 Ala Gln Leu His Lys Ser Glu Glu Ala Lys Arg Val Leu Arg Tyr Tyr
 20 25 30
 Leu Phe Gln Gly Gln Arg Tyr Ile Trp Ile Glu Thr Gln Gln Ala Phe
 35 40 45
 Tyr Gln Val Ser Leu Leu Asp His Gly Arg Ser Cys Asp Asp Val His
 50 55 60
 Arg Ser Arg His Gly Leu Ser Leu Gln Asp Gln Met Glu Arg Lys Ala
 65 70 75 80
 Ile Tyr Gly Pro Asn Val Ile Ser Ile Pro Val Lys Ser Tyr Pro Gln
 85 90 95
 Leu Leu Val Asp Glu Ala Phe Ser Ile Ala Leu Trp Leu Ala Asp His
 100 105 110
 Tyr Tyr Trp Tyr Ala Leu Cys Ile Phe Leu Ile Ser Ser Ile Ser Ile
 115 120 125
 Cys Leu Ser Leu Tyr Lys Thr Arg Lys Gln Ser Gln Thr Leu Arg Asp
 130 135 140
 Met Val Lys Leu Ser Met Arg Val Cys Val Cys Arg Pro Gly Gly Glu
 145 150 155 160
 Glu Glu Trp Val Asp Ser Ser Glu Leu Val Pro Gly Asp Cys Leu Val
 165 170 175
 Leu Ser Gln Glu Gly Leu Met Pro Cys Asp Ala Ala Leu Val Ala
 180 185 190
 Gly Glu Cys Met Val Asn Asp Ser Ser Leu Thr Gly Glu Ser Ile Pro
 195 200 205

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Val | Leu | Lys | Thr | Ala | Leu | Pro | Glu | Gly | Leu | Gly | Pro | Tyr | Cys | Ala | Glu |
| 210 | | | | | 215 | | | | | | 220 | | | | |
| Thr | His | Arg | Arg | His | Thr | Leu | Phe | Cys | Gly | Thr | Leu | Ile | Leu | His | Ala |
| 225 | | | | | 230 | | | | | 235 | | | | 240 | |
| Arg | Ala | Tyr | Val | Gly | Pro | His | Val | Leu | Ala | Val | Val | Thr | Arg | Thr | Gly |
| | | | | | 245 | | | | | 250 | | | | 255 | |
| Met | Ser | Arg | Glu | Ala | Gly | Leu | Glu | Arg | Asp | Pro | Gly | Ser | Ala | Pro | Leu |
| | | | | | 260 | | | | 265 | | | | 270 | | |
| Lys | Arg | Trp | Ser | | | | | | | | | | | | |
| | | | | 275 | 276 | | | | | | | | | | |

<210> 1004
<211> 222
<212>Amino acid
<213> Homo sapiens

| | | | | | | | | | | | | | | | |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <400> 1004 | | | | | | | | | | | | | | | |
| Phe | Val | Gly | Gly | Leu | His | Leu | His | Leu | Cys | Leu | Leu | Leu | Cys | Phe | |
| 1 | | | | 5 | | | | | 10 | | | | 15 | | |
| Met | Leu | Pro | Glu | Asp | Ala | Ala | Met | Ala | Val | Leu | Thr | Ala | Ser | Asn | His |
| | | | | | 20 | | | | 25 | | | | 30 | | |
| Val | Ser | Asn | Val | Thr | Val | Asn | Tyr | Asn | Ile | Thr | Val | Glu | Arg | Met | Asn |
| | | | | | 35 | | | | 40 | | | | 45 | | |
| Arg | Met | Gln | Gly | Leu | Arg | Val | Ser | Thr | Val | Pro | Ala | Val | Leu | Ser | Pro |
| | | 50 | | | | 55 | | | | | 60 | | | | |
| Asn | Ala | Thr | Leu | Ala | Leu | Thr | Ala | Gly | Val | Leu | Val | Asp | Ser | Ala | Val |
| 65 | | | | | 70 | | | | 75 | | | | 80 | | |
| Glu | Val | Ala | Phe | Leu | Trp | Thr | Phe | Gly | Asp | Gly | Glu | Gln | Ala | Leu | His |
| | | | | 85 | | | | 90 | | | | | 95 | | |
| Gln | Phe | Gln | Pro | Pro | Tyr | Asn | Glu | Ser | Phe | Pro | Val | Pro | Asp | Pro | Ser |
| | | | | 100 | | | | 105 | | | | | 110 | | |
| Val | Ala | Gln | Val | Leu | Val | Glu | His | Asn | Val | Thr | His | Thr | Tyr | Ala | Ala |
| | | | | 115 | | | | 120 | | | | | 125 | | |
| Pro | Gly | Glu | Tyr | Val | Leu | Thr | Val | Leu | Ala | Ser | Asn | Ala | Phe | Glu | Asn |
| | | 130 | | | 135 | | | | | 140 | | | | | |
| Arg | Thr | Gln | Gln | Val | Leu | Ile | Arg | Ser | Gly | Arg | Val | Pro | Ile | Val | Ser |
| | | | | 145 | | | | 150 | | | 155 | | | 160 | |
| Leu | Glu | Cys | Val | Ser | Cys | Lys | Ala | Gln | Ala | Val | Tyr | Glu | Val | Ser | Arg |
| | | | | 165 | | | | 170 | | | 175 | | | | |
| Ser | Ser | Tyr | Val | Tyr | Leu | Glu | Gly | Arg | Cys | Leu | Asn | Cys | Ser | Ser | Gly |
| | | | | 180 | | | | 185 | | | 190 | | | | |
| Ser | Lys | Arg | Gly | Arg | Trp | Ala | Ala | Arg | Thr | Phe | Ser | Asn | Lys | Thr | Leu |
| | | | | 195 | | | | 200 | | | 205 | | | | |
| Val | Leu | Asp | Glu | Thr | Thr | Thr | Ser | Thr | Gly | Ser | Ala | Ser | Met | | |
| | | | | 210 | | | | 215 | | | 220 | | | 222 | |

<210> 1005
<211> 363
<212>Amino acid
<213> Homo sapiens

| | | | | | | | | | | | | | | | |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <400> 1005 | | | | | | | | | | | | | | | |
| Pro | Glu | Phe | Leu | Gly | Arg | Leu | Phe | Arg | Gly | Lys | Ala | Ala | Thr | Leu | His |
| 1 | | | | 5 | | | | | | 10 | | | 15 | | |

Val His Ser Asp Gln Lys Pro Leu His Asp Gly Ala Leu Gly Ser Gln
 20 25 30
 Gln Asn Leu Val Arg Met Lys Glu Ala Leu Arg Ala Ser Thr Met Asp
 35 40 45
 Val Thr Val Val Leu Pro Ser Gly Leu Glu Lys Arg Ser Val Leu Asn
 50 55 60
 Gly Ser His Ala Met Met Asp Leu Leu Val Glu Leu Cys Leu Gln Asn
 65 70 75 80
 His Leu Asn Pro Ser His His Ala Leu Glu Ile Arg Ser Ser Glu Thr
 85 90 95
 Gln Gln Pro Leu Ser Phe Lys Pro Asn Thr Leu Ile Gly Thr Leu Asn
 100 105 110
 Val His Thr Val Phe Leu Lys Glu Lys Val Pro Glu Glu Lys Val Lys
 115 120 125
 Pro Gly Pro Pro Lys Val Pro Glu Lys Ser Val Arg Leu Val Val Asn
 130 135 140
 Tyr Leu Arg Thr Gln Lys Ala Val Val Arg Val Ser Pro Glu Val Pro
 145 150 155 160
 Leu Gln Asn Ile Leu Pro Val Ile Cys Ala Lys Cys Glu Val Ser Pro
 165 170 175
 Glu His Val Val Leu Leu Arg Asp Asn Ile Ala Gly Glu Glu Leu Glu
 180 185 190
 Leu Ser Lys Ser Leu Asn Glu Leu Gly Ile Lys Glu Leu Tyr Ala Trp
 195 200 205
 Asp Asn Arg Arg Glu Thr Phe Arg Lys Ser Ser Leu Gly Asn Asp Glu
 210 215 220
 Thr Asp Lys Glu Lys Lys Phe Leu Gly Phe Phe Lys Val Asn Lys
 225 230 235 240
 Arg Ser Asn Ser Lys Gly Cys Leu Thr Thr Pro Asn Ser Pro Ser Met
 245 250 255
 His Ser Arg Ser Leu Thr Leu Gly Pro Ser Leu Ser Leu Gly Ser Ile
 260 265 270
 Ser Gly Val Ser Val Lys Ser Glu Met Lys Lys Arg Arg Ala Pro Pro
 275 280 285
 Pro Pro Gly Ser Gly Pro Pro Val Gln Asp Lys Ala Ser Glu Lys Val
 290 295 300
 Ser Leu Gly Ser Gln Ile Asp Leu Gln Lys Lys Arg Arg Ala Pro
 305 310 315 320
 Ala Pro Pro Pro Gln Pro Pro Pro Ser Pro Leu Ile Pro Asn
 325 330 335
 Arg Thr Glu Asp Lys Glu Glu Asn Arg Lys Ser Thr Met Val Tyr Cys
 340 345 350
 Cys Ala Ser Phe Pro Thr Gln Ala Lys Arg Phe
 355 360 363

<210> 1006
 <211> 95
 <212> Amino acid
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(95)
 <223> X = any amino acid or stop code

<400> 1006
 Val Gln Trp His Asn Leu His Ser Leu Gln Pro Leu Pro Ala Gly Phe
 1 5 10 15
 Lys Xaa Phe Leu Cys Phe Ser Leu Pro Ser Ser Trp Asp Tyr Arg Cys

| | | | | |
|---|----|-------------------------------------|----|----|
| Ala Pro Pro Leu Pro Ala Pro | 20 | Phe Phe Tyr Phe Leu Phe Leu Val | 25 | 30 |
| 35 | 40 | 45 | | |
| Glu Leu Gly Phe His His Ile | 50 | Gly Xaa Ala Gly Leu Glu Leu Thr Ser | 55 | 60 |
| Thr Asp Leu Pro Ala Ser Ala | 65 | Ser Ala Gly Ile Thr Gly Met | 75 | 80 |
| Ser His Arg Ala Arg Pro Met Asp Phe Phe Leu Leu Lys Ile Leu | 85 | 90 | 95 | |

<210> 1007
<211> 151
<212>Amino acid
<213> Homo sapiens

| | | | | |
|---|-----|-----|-----|----|
| Gly Arg Arg Phe Arg Pro Pro Ser Asp Glu Glu Arg Glu Pro Trp Glu | 1 | 5 | 10 | 15 |
| Pro Trp Thr Gln Leu Arg Leu Ser Gly His Leu Lys Pro Leu His Tyr | 20 | 25 | 30 | |
| Asn Leu Met Leu Thr Ala Phe Met Glu Asn Phe Thr Phe Ser Gly Glu | 35 | 40 | 45 | |
| Val Asn Val Glu Ile Ala Cys Arg Asn Ala Thr Arg Tyr Val Val Leu | 50 | 55 | 60 | |
| His Ala Ser Arg Val Ala Val Glu Lys Val Gln Leu Ala Glu Asp Arg | 65 | 70 | 75 | 80 |
| Ala Phe Gly Ala Val Pro Val Ala Gly Phe Phe Leu Tyr Pro Gln Thr | 85 | 90 | 95 | |
| Gln Val Leu Val Val Leu Asn Arg Thr Leu Asp Ala Gln Arg Asn | 100 | 105 | 110 | |
| Tyr Asn Leu Lys Ile Ile Tyr Asn Ala Leu Ile Glu Asn Glu Leu Leu | 115 | 120 | 125 | |
| Gly Phe Phe Arg Ser Ser Tyr Val Leu His Gly Glu Arg Arg Phe Leu | 130 | 135 | 140 | |
| Gly Val Thr Gln Phe Ser Pro | 145 | 150 | 151 | |

<210> 1008
<211> 64
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(64)
<223> X = any amino acid or stop code

| | | | | |
|---|----|----|----|----|
| Lys Glu Leu Asp Pro Phe Tyr Asn Ser Xaa Arg Lys Ile Lys Tyr Leu | 1 | 5 | 10 | 15 |
| Arg Ile Tyr Leu Thr Lys Glu Val Lys Asp Leu Tyr Lys Glu Asn Tyr | 20 | 25 | 30 | |
| Lys Thr Leu Leu Lys Glu Ile Thr Asp Asp Thr Asn Lys Lys His Ile | 35 | 40 | 45 | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Pro | Ser | Ser | Trp | Thr | Gly | Arg | Ile | Asn | Thr | Val | Lys | Met | Thr | Ile | Leu |
| 50 | | | | | | | | | | | 60 | | | | 64 |

<210> 1009
<211> 60
<212>Amino acid
<213> Homo sapiens

| | | | | | | | | | | | | | | | |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <400> 1009 | | | | | | | | | | | | | | | |
| Val | Pro | His | Pro | Leu | Gln | Ala | Ile | His | Glu | Gln | Met | Asn | Cys | Lys | Glu |
| 1 | | | | 5 | | | | 10 | | | 15 | | | | |
| Tyr | Gln | Glu | Asp | Leu | Ala | Leu | Arg | Ala | Gln | Asn | Asp | Ala | Ala | Arg | |
| | | | | 20 | | | | 25 | | | 30 | | | | |
| Arg | Pro | Ser | Glu | Met | Phe | Lys | Val | Arg | Leu | Ala | Gln | Gly | Arg | Gly | Leu |
| | | | | 35 | | | | 40 | | | 45 | | | | |
| Ala | Ser | Leu | Ser | Ser | Gly | Ile | Gln | Ser | Gly | Val | Gly | | | | |
| | | | | 50 | | | | 55 | | | 60 | | | | |

<210> 1010
<211> 44
<212>Amino acid
<213> Homo sapiens

| | | | | | | | | | | | | | | | |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <400> 1010 | | | | | | | | | | | | | | | |
| Arg | Trp | Asn | Ser | Leu | Thr | Cys | Val | Val | Leu | Thr | Phe | Leu | Gly | His | Arg |
| 1 | | | | 5 | | | | 10 | | | 15 | | | | |
| Leu | Leu | Lys | Arg | Phe | Leu | Val | Pro | Lys | Leu | Arg | Arg | Phe | Leu | Lys | Pro |
| | | | | 20 | | | | 25 | | | 30 | | | | |
| Gln | Gly | His | Pro | Arg | Leu | Leu | Leu | Trp | Phe | Lys | Arg | | | | |
| | | | | 35 | | | | 40 | | | 44 | | | | |

<210> 1011
<211> 219
<212>Amino acid
<213> Homo sapiens

| | | | | | | | | | | | | | | | |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <400> 1011 | | | | | | | | | | | | | | | |
| Tyr | Gly | Glu | Phe | Val | Thr | Tyr | Gln | Gly | Val | Ala | Val | Thr | Arg | Ser | Arg |
| 1 | | | | 5 | | | | 10 | | | 15 | | | | |
| Lys | Glu | Gly | Ile | Ala | His | Asn | Tyr | Lys | Asn | Glu | Thr | Trp | Arg | Ala | |
| | | | | 20 | | | | 25 | | | 30 | | | | |
| Asn | Ile | Asp | Thr | Val | Met | Ala | Trp | Phe | Thr | Glu | Glu | Asp | Leu | Asp | Leu |
| | | | | 35 | | | | 40 | | | 45 | | | | |
| Val | Thr | Leu | Tyr | Phe | Gly | Glu | Pro | Asp | Ser | Thr | Gly | His | Arg | Tyr | Gly |
| | | | | 50 | | | | 55 | | | 60 | | | | |
| Pro | Glu | Ser | Pro | Glu | Arg | Arg | Glu | Met | Val | Arg | Gln | Val | Asp | Arg | Thr |
| | | | | 65 | | | | 70 | | | 75 | | | | 80 |

Val Gly Tyr Leu Arg Glu Ser Ile Ala Arg Asn His Leu Thr Asp Arg
 85 90 95
 Leu Asn Leu Ile Ile Thr Ser Asp His Gly Met Thr Thr Val Asp Lys
 100 105 110
 Arg Ala Gly Asp Leu Val Glu Phe His Lys Phe Pro Asn Phe Thr Phe
 115 120 125
 Arg Asp Ile Glu Phe Glu Leu Asp Tyr Gly Pro Asn Gly Met Leu
 130 135 140
 Leu Pro Lys Glu Gly Arg Leu Glu Lys Val Tyr Asp Ala Leu Lys Asp
 145 150 155 160
 Ala His Pro Lys Leu His Val Tyr Lys Lys Glu Ala Phe Pro Glu Ala
 165 170 175
 Phe His Tyr Ala Asn Asn Pro Arg Val Thr Pro Leu Leu Met Tyr Ser
 180 185 190
 Asp Leu Gly Tyr Val Ile His Gly Val Ser Arg Leu Leu Glu Ala Pro
 195 200 205
 Pro Pro Gly Ala Pro Ser Pro Gly Ser Gly Ser
 210 215 219

<210> 1012
<211> 89
<212>Amino acid
<213> Homo sapiens

<400> 1012
 Arg Ile Pro Leu Leu Arg Leu Arg Ser Ser Thr Tyr Arg Ser Lys Gly
 1 5 10 15
 Phe Asp Val Thr Val Lys His Ser His Gly Ser Trp Thr Gly Phe Gly
 20 25 30
 Gly Glu Asp Leu Ala Thr Ile Pro Lys Gly Leu Asn Thr Tyr Phe Leu
 35 40 45
 Val Asn Ile Ala Thr Ile Phe Glu Ser Lys Asn Phe Phe Leu Pro Gly
 50 55 60
 Ile Lys Trp Asn Gly Ile Leu Gly Leu Ser Tyr Ala Thr Leu Ala Lys
 65 70 75 80
 Pro Ser Ser Ser Leu Glu Thr Phe Phe
 85 89

<210> 1013
<211> 82
<212>Amino acid
<213> Homo sapiens

<400> 1013
 Ile Lys Ser Tyr Ser Gly Pro Asn Gly Arg Ser Cys Gln Ile Trp Gln
 1 5 10 15
 Arg Leu Arg Trp Gly Ser Arg Glu Leu Leu Leu Gly Trp Lys Leu Ser
 20 25 30
 His Ser Phe Ser Thr Cys Pro Phe Gln Phe Pro Asp Ile Val Glu Phe
 35 40 45
 Cys Glu Ala Met Ala Asn Ala Gly Lys Thr Val Ile Val Ala Ala Leu
 50 55 60
 Asp Gly Thr Phe Gln Arg Lys Val Arg Arg Leu Ile Gln Val Trp Ser
 65 70 75 80

Trp Asp
82

```
<210> 1014
<211> 107
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(107)
<223> X = any amino acid or stop code
```

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Tyr | Cys | Phe | Cys | Phe | Asp | Leu | Ieu | His | Xaa | Cys | Ile | His | Arg | Asp | Val |
| 1 | | | | | 5 | | | | | 10 | | | | 15 | |
| Lys | Pro | Glu | Asn | Ile | Ieu | Ile | Thr | Lys | His | Ser | Val | Ile | Lys | Leu | Cys |
| | | | | | 20 | | | | | 25 | | | | 30 | |
| Asp | Phe | Gly | Phe | Ala | Arg | Leu | Ieu | Thr | Gly | Pro | Ser | Asp | Tyr | Tyr | Thr |
| | | | | | 35 | | | | | 40 | | | 45 | | |
| Asp | Tyr | Val | Ala | Thr | Arg | Trp | Tyr | Arg | Ser | Pro | Glu | Leu | Pro | Val | Gly |
| | | | | | 50 | | | | | 55 | | | 60 | | |
| Asp | Thr | Gln | Tyr | Gly | Pro | Pro | Val | Asp | Val | Trp | Ala | Ile | Gly | Cys | Val |
| | | | | | 65 | | | | | 70 | | | 75 | | 80 |
| Ser | Ala | Glu | Leu | Ieu | Ser | Gly | Lys | Cys | Leu | Trp | Trp | Pro | Gly | Lys | Ser |
| | | | | | 85 | | | | | 90 | | | 95 | | |
| Asp | Met | Leu | Asp | Gln | Leu | Tyr | Ieu | Arg | Lys | | | | | | |
| | | | | | 100 | | | | | 105 | | | 107 | | |

```
<210> 1015
<211> 70
<212>Amino acid
<213> Homo sapiens
```

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Arg | Gly | Trp | Ala | Leu | Asp | Trp | Ile | Gly | Ala | Asp | Leu | Ser | Ieu | His | Leu |
| 1 | | | | | | | 5 | | | | 10 | | | 15 | |
| Gin | Glu | Glu | Val | Glu | Thr | Glu | Val | Ala | Trp | Glu | Glu | Cys | Gly | His | Val |
| | | | | | | | 20 | | | | 25 | | | 30 | |
| Leu | Leu | Ser | Leu | Cys | Tyr | Ser | Ser | Gln | Gln | Gly | Gly | Leu | Ieu | Val | Gly |
| | | | | | | | 35 | | | | 40 | | | 45 | |
| Val | Leu | Arg | Cys | Ala | His | Ieu | Ala | Pro | Met | Asp | Ala | Asn | Gly | Tyr | Ser |
| | | | | | 50 | | | | | 55 | | | 60 | | |
| Asp | Pro | Phe | Val | Arg | Leu | | | | | | | | | | |
| | | | | | 65 | | | | | 70 | | | | | |

```
<210> 1016
<211> 142
<212>Amino acid
<213> Homo sapiens
```

<400> 1016

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gly | Gly | Ile | Leu | Ala | Met | Glu | Tyr | Ala | Pro | Gly | Gly | Thr | Leu | Ala | Glu |
| 1 | | | | | | 5 | | | | 10 | | | | | 15 |
| Phe | Ile | Gln | Lys | Arg | Cys | Asn | Ser | Leu | Leu | Glu | Glu | Glu | Thr | Ile | Leu |
| | | | | | | 20 | | | | 25 | | | | | 30 |
| His | Phe | Phe | Val | Gln | Ile | Leu | Leu | Ala | Leu | His | His | Val | His | Thr | His |
| | | | | | | 35 | | | | 40 | | | | | 45 |
| Leu | Ile | Leu | His | Arg | Asp | Leu | Lys | Thr | Gln | Asn | Ile | Leu | Leu | Asp | Lys |
| | | | | | | 50 | | | | 55 | | | | | 60 |
| His | Arg | Met | Val | Val | Lys | Ile | Gly | Asp | Phe | Gly | Ile | Ser | Lys | Ile | Leu |
| | | | | | | 65 | | | | 70 | | | | | 80 |
| Ser | Ser | Lys | Ser | Lys | Ala | Tyr | Thr | Val | Val | Gly | Thr | Pro | Cys | Tyr | Ile |
| | | | | | | 85 | | | | 90 | | | | | 95 |
| Ser | Pro | Glu | Leu | Cys | Glu | Gly | Lys | Pro | Tyr | Asn | Gln | Lys | Ser | Asp | Ile |
| | | | | | | 100 | | | | 105 | | | | | 110 |
| Trp | Ala | Lau | Gly | Cys | Val | Leu | Tyr | Glu | Leu | Ala | Ser | Leu | Lys | Arg | Ala |
| | | | | | | 115 | | | | 120 | | | | | 125 |
| Phe | Glu | Ala | Ala | Asn | Leu | Pro | Ala | Leu | Val | Leu | Lys | Ile | Met | | |
| | | | | | | 130 | | | | 135 | | | | | 140 |
| | | | | | | | | | | | | | | | 142 |

<210> 1017
<211> 87
<212>Amino acid
<213> Homo sapiens

<400> 1017

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Val | Gln | Cys | Gly | Gly | Ile | His | Gln | Val | Ser | Gly | Ala | Val | Val | Val | Ser |
| 1 | | | | | | 5 | | | | 10 | | | | | 15 |
| Gly | Leu | Leu | Gln | Gly | Met | Met | Gly | Leu | Leu | Gly | Ser | Pro | Gly | His | Val |
| | | | | | | 20 | | | | 25 | | | | | 30 |
| Phe | Pro | His | Cys | Gly | Pro | Leu | Val | Leu | Ala | Pro | Ser | Leu | Val | Val | Ala |
| | | | | | | 35 | | | | 40 | | | | | 45 |
| Gly | Leu | Ser | Ala | His | Arg | Glu | Val | Ala | Gln | Phe | Cys | Phe | Thr | His | Trp |
| | | | | | | 50 | | | | 55 | | | | | 60 |
| Gly | Leu | Ala | Leu | Leu | Tyr | Val | Ser | Pro | Glu | Arg | Arg | Gly | Met | Val | Pro |
| | | | | | | 65 | | | | 70 | | | | | 80 |
| Ser | Gly | Gly | Val | Trp | Gly | Asp | | | | | | | | | |
| | | | | | | 85 | | | | 87 | | | | | |

<210> 1018
<211> 160
<212>Amino acid
<213> Homo sapiens

<400> 1018

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Pro | Arg | Met | Thr | Gly | Ser | Thr | His | Ala | Ser | Ala | Pro | Ser | Tyr | Gly | Gly |
| 1 | | | | | | | 5 | | | | 10 | | | | 15 |
| Ser | Cys | Arg | Asn | Asn | Leu | Phe | Tyr | Arg | Glu | Glu | Thr | Tyr | Thr | Pro | Lys |
| | | | | | | 20 | | | | 25 | | | | | 30 |
| Ala | Glu | Thr | Asp | Glu | Met | Asn | Glu | Val | Glu | Thr | Ala | Pro | Ile | Pro | Glu |
| | | | | | | 35 | | | | 40 | | | | | 45 |
| Glu | Asn | His | Val | Trp | Leu | Gln | Pro | Arg | Val | Met | Arg | Pro | Thr | Lys | Pro |

| | | | |
|---|-----|-----|-----|
| 50 | 55 | 60 | |
| Lys Lys Thr Ser Ala Val Asn Tyr Met Thr Gln Val Val Arg Cys Asp | | | |
| 65 | 70 | 75 | 80 |
| Thr Lys Met Lys Asp Arg Cys Ile Gly Ser Thr Cys Asn Arg Tyr Gln | | | |
| 85 | 90 | 95 | |
| Cys Pro Ala Gly Cys Leu Asn His Lys Ala Lys Ile Phe Gly Ser Leu | | | |
| 100 | 105 | 110 | |
| Phe Tyr Glu Ser Phe Ala Ser Ile Cys Arg Ala Ala Ile His Tyr Gly | | | |
| 115 | 120 | 125 | |
| Ile Leu Asp Asp Lys Gly Gly Leu Val Asp Ile Thr Arg Asn Gly Lys | | | |
| 130 | 135 | 140 | |
| Val Pro Phe Phe Val Lys Ser Glu Arg His Gly Val Gln Ser Leu Arg | | | |
| 145 | 150 | 155 | 160 |

<210> 1019
<211> 174
<212>Amino acid
<213> Homo sapiens

| | | | |
|---|-----|-----|-----|
| <400> 1019 | | | |
| Val Pro Gln Asn Ile Ile Cys Ala Phe Phe Cys Val Pro Cys Arg Phe | | | |
| 1 | 5 | 10 | 15 |
| Ala Ser Thr Ile Pro Phe Trp Gly Leu Thr Leu His Leu Gln His Leu | | | |
| 20 | 25 | 30 | |
| Gly Asn Asn Val Phe Leu Leu Gln Thr Leu Phe Gly Ala Val Thr Leu | | | |
| 35 | 40 | 45 | |
| Leu Ala Asn Cys Val Ala Pro Trp Ala Leu Asn His Met Ser Arg Arg | | | |
| 50 | 55 | 60 | |
| Leu Ser Gln Met Leu Leu Met Phe Leu Leu Ala Thr Cys Leu Leu Ala | | | |
| 65 | 70 | 75 | 80 |
| Ile Ile Phe Val Pro Gln Glu Met Gln Thr Leu Arg Val Val Leu Ala | | | |
| 85 | 90 | 95 | |
| Thr Leu Gly Val Gly Ala Ala Ser Leu Gly Ile Thr Cys Ser Thr Ala | | | |
| 100 | 105 | 110 | |
| Gln Glu Asn Glu Leu Ile Pro Ser Ile Ile Arg Gly Arg Ala Thr Gly | | | |
| 115 | 120 | 125 | |
| Ile Thr Gly Asn Phe Ala Asn Ile Gly Gly Ala Leu Ala Ser Leu Val | | | |
| 130 | 135 | 140 | |
| Met Ile Leu Ser Ile Tyr Ser Arg Pro Leu Pro Trp Ile Ile Tyr Gly | | | |
| 145 | 150 | 155 | 160 |
| Val Phe Ala Ile Leu Ser Gly Leu Val Val Leu Leu Leu Pro | | | |
| 165 | 170 | 174 | |

<210> 1020
<211> 225
<212>Amino acid
<213> Homo sapiens

| | | | |
|---|---|----|----|
| <400> 1020 | | | |
| Val Leu Val Ser Arg Asp His Met Lys Ser Ala Gln Gln Phe Phe Gln | | | |
| 1 | 5 | 10 | 15 |
| Leu Val Gly Gly Ser Ala Ser Glu Cys Asp Thr Ile Pro Gly Arg Gln | | | |

| | | | |
|-----|---|---------------------------------|-----|
| | 20 | 25 | 30 |
| Cys | Met Ala Ser Cys Phe Phe Leu | Leu Lys Gln Phe Asp Asp Val Leu | |
| | 35 | 40 | 45 |
| Ile | Tyr Leu Asn Ser Phe Lys Ser His Phe Tyr Asn Asp Asp Ile Phe | | |
| | 50 | 55 | 60 |
| Asn | Phe Asn Tyr Ala Gln Ala Lys Ala Ala Thr Gly Asn Thr Ser Glu | | |
| | 65 | 70 | 75 |
| Gly | Glu Glu Ala Phe Leu Leu Ile Gln Ser Glu Lys Met Lys Asn Asp | | |
| | 85 | 90 | 95 |
| Tyr | Ile Tyr Leu Ser Trp Leu Ala Arg Gly Tyr Ile Met Asn Lys Lys | | |
| | 100 | 105 | 110 |
| Pro | Arg Leu Ala Trp Glu Leu Tyr Leu Lys Met Glu Thr Ser Gly Glu | | |
| | 115 | 120 | 125 |
| Ser | Phe Ser Leu Leu Gln Leu Ile Ala Asn Asp Cys Tyr Lys Met Gly | | |
| | 130 | 135 | 140 |
| Gln | Phe Tyr Tyr Ser Ala Lys Ala Phe Asp Val Leu Glu Arg Leu Asp | | |
| | 145 | 150 | 155 |
| Pro | Asn Pro Glu Tyr Trp Glu Gly Lys Arg Gly Ala Cys Val Gly Ile | | |
| | 165 | 170 | 175 |
| Phe | Gln Met Ile Ile Ala Gly Arg Glu Pro Lys Glu Thr Leu Arg Glu | | |
| | 180 | 185 | 190 |
| Val | Leu His Leu Leu Arg Ser Thr Gly Asn Thr Gln Val Glu Tyr Met | | |
| | 195 | 200 | 205 |
| Ile | Arg Ile Met Lys Lys Trp Ala Lys Glu Asn Arg Val Ser Ile Leu | | |
| | 210 | 215 | 220 |
| Lys | | | |
| | 225 | | |

<210> 1021
 <211> 118
 <212>Amino acid
 <213> Homo sapiens

| | | | | |
|-----|---|-----|-----|----|
| | <400> 1021 | | | |
| Leu | Lys Val Ser Asp Glu Leu Val Gln Gln Tyr Gln Ile Lys Asn Gln | | | |
| | 1 | 5 | 10 | 15 |
| Cys | Leu Ser Ala Ile Ala Ser Asp Ala Glu Gln Glu Pro Lys Ile Asp | | | |
| | 20 | 25 | 30 | |
| Pro | Tyr Ala Phe Val Glu Gly Asp Glu Glu Phe Leu Phe Pro Asp Lys | | | |
| | 35 | 40 | 45 | |
| Lys | Asp Arg Gln Asn Ser Glu Arg Glu Ala Gly Lys Lys His Lys Val | | | |
| | 50 | 55 | 60 | |
| Arg | Glu Ile Thr Val His Gln Arg Val Thr Val Asp Phe Val Ala Leu | | | |
| | 65 | 70 | 75 | 80 |
| His | Ile Val Thr Leu Leu Leu Pro Gln Leu Ser His Phe Phe Cys Leu | | | |
| | 85 | 90 | 95 | |
| Arg | Ile Glu Arg Val Ile Ile Tyr Leu Glu Lys Pro Ile Phe Ala Arg | | | |
| | 100 | 105 | 110 | |
| Leu | Arg Trp Leu Met Pro | | | |
| | 115 | 118 | | |

<210> 1022
 <211> 178
 <212>Amino acid
 <213> Homo sapiens

<400> 1022
 Gly Val Pro Arg Asn Leu Pro Ser Ser Leu Glu Tyr Leu Leu Leu Ser
 1 5 10 15
 Tyr Asn Arg Ile Val Lys Leu Ala Pro Glu Asp Leu Ala Asn Leu Thr
 20 25 30
 Ala Leu Arg Val Leu Asp Val Gly Gly Asn Cys Arg Arg Cys Asp His
 35 40 45
 Ala Pro Asn Pro Cys Met Glu Cys Pro Arg His Phe Pro Gln Leu His
 50 55 60
 Pro Asp Thr Phe Ser His Leu Ser Arg Leu Glu Gly Leu Val Leu Lys
 65 70 75 80
 Asp Ser Ser Leu Ser Trp Leu Asn Ala Ser Trp Phe Arg Gly Leu Gly
 85 90 95
 Asn Leu Arg Val Leu Asp Leu Ser Glu Asn Phe Leu Tyr Lys Cys Ile
 100 105 110
 Thr Lys Thr Lys Ala Phe Gln Gly Leu Thr Gln Leu Arg Lys Leu Asn
 115 120 125
 Leu Ser Phe Asn Tyr Gln Lys Arg Val Ser Phe Ala His Leu Val Ser
 130 135 140
 Gly Pro Pro Phe Leu Arg Gly Ser Leu Gly Arg Pro Leu Lys Gly Ala
 145 150 155 160
 Gly Thr Trp His Gly Asn Leu Ser Phe Pro Leu His Phe Glu Trp Gly
 165 170 175
 Lys Thr
 178

<210> 1023
 <211> 146
 <212>Amino acid
 <213> Homo sapiens

<400> 1023
 Ile Leu Phe Ala Ala Leu Ile Trp Ser Ser Phe Asp Glu Asn Ile Glu
 1 5 10 15
 Ala Ser Ala Gly Gly Gly Gly Ser Ser Ile Asp Ala Val Met Val
 20 25 30
 Asp Ser Gly Ala Val Val Glu Gln Tyr Lys Arg Met Gln Ser Gln Glu
 35 40 45
 Ser Ser Ala Lys Arg Ser Asp Glu Gln Arg Lys Met Lys Glu Gln Gln
 50 55 60
 Ala Ala Glu Glu Leu Arg Glu Lys Gln Ala Ala Glu Gln Glu Arg Leu
 65 70 75 80
 Lys Gln Leu Glu Lys Glu Arg Leu Ala Ala Gln Glu Gln Lys Lys Gln
 85 90 95
 Ala Glu Glu Ala Ala Lys Gln Ala Glu Leu Lys Gln Lys Gln Ala Glu
 100 105 110
 Glu Ala Ala Ala Lys Ala Ala Ala Asp Ala Lys Ala Lys Ala Glu Ala
 115 120 125
 Asp Ala Lys Ala Ala Glu Glu Ala Ala Lys Lys Ala Ala Ala Asp Ala
 130 135 140
 Lys Lys
 145 146

<210> 1024
 <211> 39
 <212>Amino acid

<213> Homo sapiens

<400> 1024
 Ala Met Glu Ile Val His Glu Pro Arg Asp Leu Glu Arg Tyr Met Arg
 1 5 10 15
 Glu Ala Val Lys Val Ser Asn Asp Ser Pro Val Leu Leu Asp Arg Phe
 20 25 30
 Leu Asn Asp Ala Ile Glu Cys
 35 39

<210> 1025
<211> 53
<212>Amino acid
<213> Homo sapiens

<400> 1025
 Met Leu Ser Pro Gly Tyr Asp Tyr Gly Tyr Val Cys Val Glu Phe Ser
 1 5 10 15
 Leu Leu Glu Asp Ala Ile Gly Cys Met Glu Ala Asn Gln Val Ala Leu
 20 25 30
 Tyr Phe Gly Gln Met Met Leu Glu Gly Tyr Ile Phe Leu Tyr Met Gly
 35 40 45
 Arg Glu Gly Phe Lys
 50 53

<210> 1026
<211> 365
<212>Amino acid
<213> Homo sapiens

<400> 1026
 Pro Arg Val Arg Ser Ser Gly Gly Gln Glu Asp Pro Ala Ser Gln Gln
 1 5 10 15
 Trp Ala Arg Pro Arg Phe Thr Gln Pro Ser Lys Met Arg Arg Arg Val
 20 25 30
 Ile Ala Arg Pro Val Gly Ser Ser Val Arg Leu Lys Cys Val Ala Ser
 35 40 45
 Gly His Pro Arg Pro Asp Ile Thr Trp Met Lys Asp Asp Gln Ala Leu
 50 55 60
 Thr Arg Pro Glu Ala Ala Glu Pro Arg Lys Lys Trp Thr Leu Ser
 65 70 75 80
 Leu Lys Asn Leu Arg Pro Glu Asp Ser Gly Lys Tyr Thr Cys Arg Val
 85 90 95
 Ser Asn Arg Ala Gly Ala Ile Asn Ala Thr Tyr Lys Val Asp Val Ile
 100 105 110
 Gln Arg Thr Arg Ser Lys Pro Val Leu Thr Gly Thr His Pro Val Asn
 115 120 125
 Thr Thr Val Asp Phe Gly Gly Thr Thr Ser Phe Gln Cys Lys Val Arg
 130 135 140
 Ser Asp Val Lys Pro Val Ile Gln Trp Leu Lys Arg Val Glu Tyr Gly

| | | | |
|---|-----|-----|-----|
| 145 | 150 | 155 | 160 |
| Ala Glu Gly Arg His Asn Ser Thr Ile Asp Val Gly Gly Gln Lys Phe | | | |
| 165 | 170 | 175 | |
| Val Val Leu Pro Thr Gly Asp Val Trp Ser Arg Pro Asp Gly Ser Tyr | | | |
| 180 | 185 | 190 | |
| Leu Asn Lys Leu Leu Ile Thr Arg Ala Arg Gln Asp Asp Ala Gly Met | | | |
| 195 | 200 | 205 | |
| Tyr Ile Cys Leu Gly Ala Asn Thr Met Gly Tyr Ser Phe Arg Ser Ala | | | |
| 210 | 215 | 220 | |
| Phe Leu Thr Val Leu Pro Asp Pro Lys Pro Pro Gly Pro Pro Val Ala | | | |
| 225 | 230 | 235 | 240 |
| Ser Ser Ser Ala Thr Ser Leu Pro Trp Pro Val Val Ile Gly Ile | | | |
| 245 | 250 | 255 | |
| Pro Ala Gly Ala Val Phe Ile Leu Gly Thr Leu Leu Leu Trp Leu Cys | | | |
| 260 | 265 | 270 | |
| Gln Ala Gln Lys Lys Pro Cys Thr Pro Ala Pro Ala Pro Pro Leu Pro | | | |
| 275 | 280 | 285 | |
| Gly His Arg Pro Pro Gly Thr Ala Arg Asp Arg Ser Gly Asp Lys Asp | | | |
| 290 | 295 | 300 | |
| Leu Pro Ser Leu Ala Ala Leu Ser Ala Gly Pro Gly Val Gly Leu Cys | | | |
| 305 | 310 | 315 | 320 |
| Glu Glu His Gly Ser Pro Ala Ala Pro Gln His Leu Leu Gly Pro Gly | | | |
| 325 | 330 | 335 | |
| Pro Val Ala Gly Pro Lys Leu Tyr Pro Lys Leu Tyr Thr Asp Ile Pro | | | |
| 340 | 345 | 350 | |
| His His Thr His Thr His Thr Pro His Pro Pro Ala Asn | | | |
| 355 | 360 | 365 | |

<210> 1027

<211> 30

<212>Amino acid

<213> Homo sapiens

| | | | |
|---|----|----|----|
| <400> 1027 | | | |
| Asn Phe His Phe Thr Gly Lys Cys Leu Phe Met Ser Gly Leu Ser Glu | | | |
| 1 | 5 | 10 | 15 |
| Val Gln Leu Thr His Met Asp Asp His Thr Leu Pro Gly Tyr | | | |
| 20 | 25 | 30 | |

<210> 1028

<211> 104

<212>Amino acid

<213> Homo sapiens

| | | | |
|---|----|----|----|
| <400> 1028 | | | |
| Ser Pro Arg Lys Arg Lys Thr Arg His Ser Thr Asn Pro Pro Leu Glu | | | |
| 1 | 5 | 10 | 15 |
| Cys His Val Gly Trp Val Met Asp Ser Arg Asp His Gly Pro Gly Thr | | | |
| 20 | 25 | 30 | |
| Ser Ser Val Ser Thr Ser Asn Ala Ser Pro Ser Glu Gly Ala Pro Leu | | | |
| 35 | 40 | 45 | |
| Ala Gly Ser Tyr Gly Cys Thr Pro His Ser Phe Pro Lys Phe Gln His | | | |
| 50 | 55 | 60 | |
| Pro Ser His Glu Leu Leu Lys Glu Asn Gly Phe Thr Gln Gln Val Tyr | | | |

| | | | |
|---|-----|----|----|
| 65 | 70 | 75 | 80 |
| His Lys Tyr Arg Arg Arg Cys Leu Ser Glu Arg Lys Arg Leu Gly Ile | | | |
| 85 | 90 | 95 | |
| Gly Gln Ser Gln Glu Met Asn Thr | | | |
| 100 | 104 | | |

<210> 1029
<211> 119
<212> Amino acid
<213> Homo sapiens

| | | | |
|---|-----|-----|----|
| <400> 1029 | | | |
| Pro Gly Ser Gly Gly Ser Ala Gly Gly Arg Asp Gly Ser Ala Tyr Gln | | | |
| 1 | 5 | 10 | 15 |
| Gly Ala Leu Leu Pro Arg Glu Gln Phe Ala Ala Pro Leu Gly Arg Pro | | | |
| 20 | 25 | 30 | |
| Val Gly Thr Ser Tyr Ser Ala Thr Tyr Pro Ala Tyr Val Ser Pro Asp | | | |
| 35 | 40 | 45 | |
| Val Ala Gln Ser Trp Thr Ala Gly Pro Phe Asp Gly Ser Val Leu His | | | |
| 50 | 55 | 60 | |
| Gly Leu Pro Gly Arg Arg Pro Thr Phe Val Ser Asp Phe Leu Glu Glu | | | |
| 65 | 70 | 75 | 80 |
| Phe Pro Gly Glu Gly Arg Glu Cys Val Asn Cys Gly Ala Leu Ser Thr | | | |
| 85 | 90 | 95 | |
| Pro Leu Trp Arg Arg Asp Gly Thr Gly His Tyr Leu Cys Asn Ala Cys | | | |
| 100 | 105 | 110 | |
| Gly Leu Tyr His Lys Met Asn | | | |
| 115 | 119 | | |

<210> 1030
<211> 171
<212> Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(171)
<223> X = any amino acid or stop code

| | | | |
|---|-----|-----|----|
| <400> 1030 | | | |
| Pro Asp His Arg His Gly Ala Leu Trp Trp Trp Tyr Ser Cys Gly Val | | | |
| 1 | 5 | 10 | 15 |
| Leu Pro Val Thr Val Ser Arg Asn Glu Gly Asp Glu Arg Asn Gln Val | | | |
| 20 | 25 | 30 | |
| Leu Thr Leu Tyr Leu Trp Ile Arg Gln Glu Trp Thr Asp Ala Tyr Leu | | | |
| 35 | 40 | 45 | |
| Arg Trp Asp Pro Asn Ala Tyr Gly Gly Leu Asp Ala Ile Arg Ile Pro | | | |
| 50 | 55 | 60 | |
| Ser Ser Leu Val Trp Arg Pro Asp Ile Val Leu Tyr Asn Lys Tyr Cys | | | |
| 65 | 70 | 75 | 80 |
| Leu Ser Ala Ala Pro Pro Leu Ser Tyr Pro Ser Leu Asp Leu Pro Leu | | | |
| 85 | 90 | 95 | |
| Ala Val Gly Val Xaa Xaa Ser Pro Leu Pro Thr Thr Xaa Pro Gly Cys | | | |
| 100 | 105 | 110 | |

His Ala Ala Leu Glu Ala Phe Pro Gln Asp Pro Ser Lys Leu Pro Ser
 115 120 125
 Thr Gln Pro Leu His Gly Thr Pro Thr Leu Gly Tyr Pro Arg Pro Ala
 130 135 140
 Gln Ala Glu Arg Leu Leu Gly Thr Tyr Cys Val Val Gln Gly Arg Cys
 145 150 155 160
 Leu Asn His Lys Gly Leu Ser Arg Ala His Phe
 165 170 171

<210> 1031
 <211> 198
 <212>Amino acid
 <213> Homo sapiens

<400> 1031
 Tyr Ala Leu Thr Gly Ala Leu Val Ile Val Thr Gly Met Val Met Gly
 1 5 10 15
 Asn Ile Ala Asp Tyr Phe Asn Leu Pro Val Ser Ser Met Ser Asn Thr
 20 25 30
 Phe Thr Phe Leu Asn Ala Gly Ile Leu Ile Ser Ile Phe Leu Asn Ala
 35 40 45
 Trp Leu Met Glu Ile Val Pro Leu Lys Thr Gln Leu Arg Phe Gly Phe
 50 55 60
 Leu Leu Met Val Leu Ala Val Ala Gly Leu Met Phe Ser His Ser Leu
 65 70 75 80
 Ala Leu Phe Ser Ala Ala Met Phe Ile Leu Gly Val Val Ser Gly Ile
 85 90 95
 Thr Met Ser Ile Gly Thr Phe Leu Val Thr Gln Met Tyr Glu Gly Arg
 100 105 110
 Gln Arg Gly Ser Arg Leu Leu Phe Thr Asp Ser Phe Phe Ser Met Ala
 115 120 125
 Gly Met Ile Phe Pro Met Ile Ala Ala Phe Leu Leu Ala Arg Ser Ile
 130 135 140
 Glu Trp Tyr Trp Val Tyr Ala Cys Ile Gly Leu Val Tyr Val Ala Ile
 145 150 155 160
 Phe Ile Leu Thr Phe Gly Cys Glu Phe Pro Ala Leu Cys Ser His Ala
 165 170 175
 Thr Lys Leu Gly Thr Ala Ser Ser Tyr Pro Ser Leu Asp Val Val Gln
 180 185 190
 Leu Arg Thr Leu Asn Ala
 195 198

<210> 1032
 <211> 138
 <212>Amino acid
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(138)
 <223> X = any amino acid or stop code

<400> 1032
 Met Ala Lys Val Gly Leu Lys Thr Glu His Tyr Asp Arg Tyr Pro His

| | | | |
|---|-----|-----|-----|
| 1 | 5 | 10 | 15 |
| Met Phe Ser Gly Gly Gln Arg Gln Arg Ile Ala Ile Ala Arg Gly Leu | 20 | 25 | 30 |
| Met Leu Asp Pro Asp Val Val Ile Ala Asp Glu Pro Val Ser Ala Leu | 35 | 40 | 45 |
| Asp Val Ser Val Arg Ala Gln Val Leu Asn Leu Met Met Asp Leu Gln | 50 | 55 | 60 |
| Gln Glu Leu Gly Leu Ser Tyr Val Phe Ile Ser His Asp Leu Ser Val | 65 | 70 | 75 |
| Val Glu His Ile Ala Asp Glu Val Met Val Met Tyr Leu Gly Arg Cys | 85 | 90 | 95 |
| Val Glu Lys Gly Thr Lys Asp Gln Ile Phe Asn Asn Pro Arg His Pro | 100 | 105 | 110 |
| Tyr Thr Gln Ala Leu Leu Ser Ala Thr Pro Arg Leu Asn Pro Asp Asp | 115 | 120 | 125 |
| Arg Arg Glu Arg Ile Lys Leu Ser Xaa * | 130 | 135 | 137 |

<210> 1033

<211> 141

<212>Amino acid

<213> Homo sapiens

| | | | | |
|---|-----|-----|-----|-----|
| <400> 1033 | | | | |
| Ser Ala Thr Leu Glu Arg Val Leu Asn His Pro Asp Glu Thr Gln Ala | 1 | 5 | 10 | 15 |
| Arg Arg Leu Met Thr Leu Glu Asp Ile Val Ser Gly Tyr Ser Asn Val | 20 | 25 | 30 | |
| Leu Ile Ser Leu Ala Asp Ser Gln Gly Lys Thr Val Tyr His Ser Pro | 35 | 40 | 45 | |
| Gly Ala Pro Asp Ile Arg Glu Phe Thr Arg Asp Ala Ile Pro Asp Lys | 50 | 55 | 60 | |
| Asp Ala Gln Gly Gly Glu Val Tyr Leu Leu Ser Gly Pro Thr Met Met | 65 | 70 | 75 | 80 |
| Met Pro Gly His Gly His Met Glu His Ser Asn Trp Arg Met | 85 | 90 | 95 | |
| Ile Asn Leu Pro Val Gly Pro Leu Val Asp Gly Lys Pro Ile Tyr Thr | 100 | 105 | 110 | |
| Leu Tyr Ile Ala Leu Ser Ile Asp Phe His Leu His Tyr Ile Asn Asp | 115 | 120 | 125 | |
| Leu Met Asn Lys Leu Ile Met Thr Ala Ser Val Ile Ile | 130 | 135 | 140 | 141 |

<210> 1034

<211> 112

<212>Amino acid

<213> Homo sapiens

| | | | | |
|---|----|----|----|----|
| <400> 1034 | | | | |
| Val Leu Ala Tyr Pro Gly Ile Lys Val Ser Thr Ala Glu Ala Arg Ala | 1 | 5 | 10 | 15 |
| Ile Leu Pro Ala Gln Tyr Arg Arg Gln Asp Cys Ile Ala His Gly Arg | 20 | 25 | 30 | |
| His Leu Ala Gly Phe Ile His Ala Cys Tyr Ser Arg Gln Pro Glu Leu | | | | |

| | | |
|---|-----|-----|
| 35 | 40 | 45 |
| Ala Ala Lys Leu Met Lys Asp Val Ile Ala Glu Pro Tyr Arg Glu Arg | | |
| 50 | 55 | 60 |
| Leu Leu Pro Gly Phe Arg Gln Ala Arg Gln Ala Val Ala Glu Ile Gly | | |
| 65 | 70 | 75 |
| Ala Val Ala Ser Gly Ile Ser Gly Ser Gly Pro Thr Leu Phe Ala Leu | | |
| 85 | 90 | 95 |
| Cys Asp Lys Pro Glu Thr Ala Gln Arg Val Ala Asp Trp Leu Gly Lys | | |
| 100 | 105 | 110 |
| | | 112 |

<210> 1035
<211> 92
<212>Amino acid
<213> Homo sapiens

| | | |
|---|----|----|
| <400> 1035 | | |
| Gly Gln Gln Gln Arg Val Ala Leu Ala Arg Ala Leu Ile Leu Lys Pro | | |
| 1 | 5 | 10 |
| Leu Val Leu Leu Phe Asp Glu Pro Leu Ser Asn Leu Asp Ala Asn Leu | | |
| 20 | 25 | 30 |
| Arg Arg Ser Met Arg Asp Lys Ile Arg Glu Leu Gln Lys Gln Phe Asp | | |
| 35 | 40 | 45 |
| Ile Thr Ser Leu Tyr Val Thr His Asp Gln Ser Glu Ala Phe Ala Val | | |
| 50 | 55 | 60 |
| Ser Asp Thr Val Leu Val Met Asn Lys Gly His Ile Met Gln Ile Gly | | |
| 65 | 70 | 75 |
| Ser Pro Gln Asp Leu Arg Val Arg Leu Asn Trp | | |
| 85 | 90 | 92 |

<210> 1036
<211> 51
<212>Amino acid
<213> Homo sapiens

| | | |
|---|----|----|
| <400> 1036 | | |
| Ala Val His Tyr Leu Glu Arg Val Arg Ile Ala Glu His Ala His Lys | | |
| 1 | 5 | 10 |
| Phe Pro Gly Gln Ile Ser Gly Gly Gln Gln Arg Val Ala Ile Ala | | |
| 20 | 25 | 30 |
| Arg Ser Leu Cys Met Lys Pro Lys Ile Met Leu Phe Asp Glu Pro Thr | | |
| 35 | 40 | 45 |
| Ser Ala Leu | | |
| 50 | 51 | |

<210> 1037
<211> 72
<212>Amino acid
<213> Homo sapiens

<400> 1037
 Ala Pro Tyr Asp Ala Glu Asn Tyr Phe Asp Tyr Asp Asn Leu Asn Asn
 1 5 10 15
 Gly Pro Ser Leu Gln His Trp Phe Gly Val Asp Ser Leu Gly Arg Asp
 20 25 30
 Ile Phe Ser Arg Val Val Gly Ala Gln Ile Ser Leu Ala Ala Gly
 35 40 45
 Val Phe Ala Val Phe Ile Gly Ala Ala Ile Gly Thr Leu Leu Gly Leu
 50 55 60
 Leu Ala Gly Tyr Tyr Glu Gly Trp
 65 70 72

<210> 1038
 <211> 188
 <212>Amino acid
 <213> Homo sapiens

<400> 1038
 Val Phe Cys Leu Ile Ala Asp Leu Asp Pro Ile Asp Glu Leu Val Asp
 1 5 10 15
 Phe Pro Ile Val Tyr Ala Ser Ala Leu Asn Gly Ile Ala Gly Leu Asp
 20 25 30
 His Glu Asp Met Ala Glu Asp Met Thr Pro Leu Tyr Gln Ala Ile Val
 35 40 45
 Asp His Val Pro Ala Pro Asp Val Asp Leu Asp Gly Pro Phe Gln Met
 50 55 60
 Gln Ile Ser Gln Leu Asp Tyr Asn Ser Tyr Val Gly Val Ile Gly Ile
 65 70 75 80
 Gly Arg Ile Lys Arg Gly Lys Val Lys Pro Asn Gln Gln Val Thr Ile
 85 90 95
 Ile Asp Ser Glu Gly Lys Thr Arg Asn Ala Lys Val Gly Lys Val Leu
 100 105 110
 Gly His Leu Gly Leu Glu Arg Ile Glu Thr Asp Leu Ala Glu Ala Gly
 115 120 125
 Asp Ile Val Ala Ile Thr Gly Leu Gly Glu Leu Asn Ile Ser Asp Thr
 130 135 140
 Val Cys Asp Thr Gln Asn Val Glu Ala Leu Pro Ala Leu Ser Val Asp
 145 150 155 160
 Glu Pro Thr Val Ser Met Phe Phe Cys Val Asn Thr Ser Pro Phe Cys
 165 170 175
 Gly Lys Glu Gly Lys Phe Val Thr Ser Arg Gln Ile
 180 185 188

<210> 1039
 <211> 122
 <212>Amino acid
 <213> Homo sapiens

<400> 1039
 Gln Gly Thr Arg Ala Glu Ser Gln Gly Ser Ser Lys Asp Lys Thr Arg
 1 5 10 15
 Leu Ala Phe Ala Gly Leu Lys Phe Gly Asp Tyr Gly Ser Ile Asp Tyr

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gly | Arg | Asn | Tyr | Gly | Val | Ala | Tyr | Asp | Ile | Gly | Ala | Trp | Thr | Asp | Val |
| 20 | | | | | | | 25 | | | | | | 30 | | |
| | | | | | | | | 40 | | | | | 45 | | |
| 35 | | | | | | | | | | | | | | | |
| Leu | Pro | Glu | Phe | Gly | Gly | Asp | Thr | Trp | Thr | Gln | Thr | Asp | Val | Phe | Met |
| | | | | | | | | | | | | | 50 | | |
| | | | | | | | | | | | | | 55 | | 60 |
| | | | | | | | | | | | | | | | |
| Thr | Gln | Arg | Ala | Thr | Gly | Val | Ala | Thr | Tyr | Arg | Asn | Asn | Asp | Phe | Phe |
| | | | | | | | | | | | | | 65 | | |
| | | | | | | | | | | | | | 70 | | 75 |
| | | | | | | | | | | | | | | | |
| Gly | Leu | Val | Asp | Gly | Leu | Asn | Phe | Ala | Ala | Gln | Tyr | Gln | Gly | Lys | Asn |
| | | | | | | | | | | | | | 85 | | 90 |
| | | | | | | | | | | | | | | | 95 |
| Asp | Arg | Ser | Asp | Phe | Asp | Asn | Tyr | Thr | Glu | Gly | Asn | Gly | His | Gly | Phe |
| | | | | | | | | | | | | | 100 | | 105 |
| | | | | | | | | | | | | | | | 110 |
| Gly | Phe | Ser | Ala | Thr | Tyr | Glu | Tyr | Gly | | | | | | | |
| | | | | | | | | | | | | | 115 | | 120 |
| | | | | | | | | | | | | | | | 122 |

<210> 1040

<211> 65

<212>Amino acid

<213> Homo sapiens

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asp | Thr | Tyr | Ser | Val | Ser | Ile | Pro | Leu | Gly | Ala | Thr | Ile | Asn | Met | Ala |
| 1 | | | | | | | | | | 5 | | 10 | | | 15 |
| Gly | Ala | Ala | Ile | Thr | Ile | Thr | Val | Leu | Thr | Leu | Ala | Ala | Val | Asn | Thr |
| | | | | | | | | | | | | | 20 | | 25 |
| | | | | | | | | | | | | | | | 30 |
| Leu | Gly | Ile | Pro | Val | Asp | Leu | Pro | Thr | Ala | Leu | Leu | Leu | Ser | Val | Val |
| | | | | | | | | | | | | | 35 | | 40 |
| | | | | | | | | | | | | | | | 45 |
| Ala | Ser | Leu | Cys | Ala | Cys | Gly | Ala | Ser | Gly | Val | Ala | Gly | Gly | Ser | Leu |
| | | | | | | | | | | | | | 50 | | 55 |
| Leu | | | | | | | | | | | | | | | 60 |
| | | | | | | | | | | | | | | | 65 |

<210> 1041

<211> 46

<212>Amino acid

<213> Homo sapiens

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ala | Asn | Ala | Gln | Gln | Gly | Leu | Pro | Ser | Gly | Ile | Thr | Leu | Lys | Leu | Asn |
| 1 | . | | | | | | | | | 5 | | 10 | | | 15 |
| Asn | Leu | Val | Asp | Lys | Gly | Leu | Val | Asp | Arg | Leu | Tyr | Ala | Ala | Ser | Ser |
| | | | | | | | | | | | | 20 | | 25 | 30 |
| | | | | | | | | | | | | | | | |
| Ser | Gly | Val | Pro | Val | Asn | Leu | Leu | Val | Arg | Gly | Thr | Cys | Ser | | |
| | | | | | | | | | | | | | 35 | | 40 |
| | | | | | | | | | | | | | | | 45 |
| | | | | | | | | | | | | | | | 46 |

<210> 1042

<211> 146

<212>Amino acid

<213> Homo sapiens

<400> 1042
 Ala Arg Met Thr Leu Ile Pro Gly Thr His Leu Leu Glu Asn Ile His
 1 5 10 15
 Asn Ile Trp Val Asn Gly Val Gly Thr Asn Ser Ala Pro Phe Trp Arg
 20 25 30
 Met Leu Leu Asn Ser Phe Val Met Ala Phe Ser Ile Thr Leu Gly Lys
 35 40 45
 Ile Thr Val Ser Met Leu Ser Ala Phe Ala Ile Val Trp Phe Arg Phe
 50 55 60
 Pro Leu Arg Asn Leu Phe Phe Trp Met Ile Phe Ile Thr Leu Met Leu
 65 70 75 80
 Pro Val Glu Val Arg Ile Phe Pro Thr Val Glu Val Ile Ala Asn Leu
 85 90 95
 Gln Met Leu Asp Ser Tyr Ala Gly Leu Thr Leu Pro Leu Met Ala Ser
 100 105 110
 Ala Thr Ala Thr Phe Leu Phe Arg Lys Leu Asn Met Ser Gly Pro Asp
 115 120 125
 Lys Val Val Pro Ala Ala Arg Ile Ser Gly Tyr Gly Pro Arg Val Arg
 130 135 140
 Lys Gln
 145 146

<210> 1043
<211> 133
<212>Amino acid
<213> Homo sapiens

<400> 1043
 Cys Ala Lys Cys Leu Arg Asp Ala Asp Glu Cys Pro Ser Gly Ala Phe
 1 5 10 15
 Glu Arg Ile Gly Arg Asp Ile Ser Leu Asp Ala Leu Glu Arg Glu Val
 20 25 30 80
 Met Lys Asp Asp Ile Phe Phe Arg Thr Ser Gly Gly Val Thr Leu
 35 40 45
 Ser Gly Gly Glu Val Leu Met Gln Ala Glu Phe Ala Thr Arg Phe Leu
 50 55 60
 Gln Arg Leu Arg Leu Trp Gly Val Ser Cys Ala Ile Glu Thr Ala Gly
 65 70 75 80
 Asp Ala Pro Ala Ser Lys Leu Leu Pro Leu Ala Lys Leu Cys Asp Glu
 85 90 95
 Val Leu Phe Asp Leu Lys Ile Met Asp Ala Thr Gln Ala Arg Asp Val
 100 105 110
 Val Lys Met Asn Leu Pro Arg Val Leu Glu Asn Leu Arg Leu Leu Val
 115 120 125
 Ser Glu Gly Val Asn
 130 133

<210> 1044
<211> 115
<212>Amino acid
<213> Homo sapiens

<400> 1044
 Tyr Leu Leu Leu Phe Val Cys Phe Leu Val Met Ser Leu Leu Val Gly

| | | | |
|---|-----|-----|-----|
| 1 | 5 | 10 | 15 |
| Leu Val Tyr Lys Phe Thr Ala Glu Arg Ala Gly Lys Gln Ser Leu Asp | 20 | 25 | 30 |
| Asp Leu Met Asn Ser Ser Leu Tyr Leu Met Arg Ser Glu Leu Arg Glu | 35 | 40 | 45 |
| Ile Pro Pro His Asp Trp Gly Lys Thr Leu Lys Glu Met Asp Leu Asn | 50 | 55 | 60 |
| Leu Ser Phe Asp Leu Arg Val Glu Pro Leu Ser Lys Tyr His Leu Asp | 65 | 70 | 75 |
| Asp Ile Ser Met His Arg Leu Arg Gly Gly Glu Ile Val Ala Leu Asp | 85 | 90 | 95 |
| Asp Gln Tyr Thr Phe Leu Gln Arg Ile Pro Arg Ser His Tyr Val Leu | 100 | 105 | 110 |
| Ala Val Gly | | | |
| | 115 | | |

<210> 1045
<211> 69
<212>Amino acid
<213> Homo sapiens

| | | | |
|---|----|----|----|
| 1 | 5 | 10 | 15 |
| Val Glu Leu Phe Leu Ser Asp Glu Gly Asp Asp Val Val Ile Glu Val | 20 | 25 | 30 |
| Ala Asp Gln Gly Cys Gly Val Pro Glu Ser Leu Arg Asp Lys Ile Phe | 35 | 40 | 45 |
| Glu Gln Gly Val Ser Thr Arg Ala Asp Glu Pro Gly Glu His Gly Ile | 50 | 55 | 60 |
| Gly Leu Tyr Leu Ile Ala Ser Tyr Val Thr Arg Cys Gly Gly Val Ile | 65 | | |
| Thr Leu Glu Asp Asn | | | |
| | 69 | | |

<210> 1046
<211> 69
<212>Amino acid
<213> Homo sapiens

| | | | |
|---|----|----|----|
| 1 | 5 | 10 | 15 |
| Asp Ala Ile Ile Ala Pro Asp Ala Asn Ala Leu Pro Ala Ala Gln | 20 | 25 | 30 |
| Ala Ala Glu Asn Leu Lys Asn Asp Lys Val Ala Ile Val Gly Phe Ser | 35 | 40 | 45 |
| Thr Pro Asn Val Met Arg Pro Tyr Val Glu Arg Gly Thr Val Lys Glu | 50 | 55 | 60 |
| Phe Gly Leu Trp Asp Val Val Gln Gln Gly Lys Ile Ser Val Tyr Val | 65 | | |
| Ala Asp Ala Leu Gln | | | |
| | 69 | | |

<210> 1047
<211> 43
<212>Amino acid

<213> Homo sapiens

<400> 1047
 Tyr Ile Val Val Thr Gly Lys Thr His Cys Gly Thr Pro Leu Thr Thr
 1 5 10 15
 Val Thr Gly Asp Ala Thr Gln Ser Gly Tyr Leu Thr Leu Asn Leu Pro
 20 25 30
 Glu Met Trp Glu Val Ser Gly Tyr Asn Arg Val
 35 40 43

<210> 1048
 <211> 77
 <212>Amino acid
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(77)
 <223> X = any amino acid or stop code

<400> 1048
 Kaa Glu Gly Val Glu Pro Asp Ile Asn Ala Ser Lys Thr Arg Gln Gln
 1 5 10 15
 Leu Asn Asp Val Ala Gly Lys Met Lys Ile Ile Glu Ala Arg Leu Ser
 20 25 30
 Ala Ile Thr Asn Asn Gln Thr Lys Ser Leu Lys Leu Asn Pro Val Ala
 35 40 45
 Leu Pro Lys Val Ala Ser Gln Leu Leu Asp Glu Leu Gly Tyr Ser Leu
 50 55 60
 Leu Ala Arg Arg Ala Asp Leu Gln Ser Ala His Xaa *
 65 70 75 76

<210> 1049
 <211> 79
 <212>Amino acid
 <213> Homo sapiens

<400> 1049
 Glu Asn Ile Ala Glu Glu Tyr Ala Thr Lys Arg Tyr Arg Ser Asn Val
 1 5 10 15
 Ile Asn Trp Gly Met Leu Pro Leu Gln Met Ala Glu Val Pro Thr Phe
 20 25 30
 Glu Val Gly Asp Tyr Ile Tyr Ile Pro Gly Ile Lys Ala Ala Leu Asp
 35 40 45
 Asn Pro Gly Thr Thr Phe Lys Gly Tyr Val Ile His Glu Asp Ala Pro
 50 55 60
 Val Thr Glu Ile Thr Leu Tyr Met Glu Ser Gln Glu Ala Arg Thr
 65 70 75 79

<210> 1050
<211> 99
<212>Amino acid
<213> Homo sapiens

<400> 1050
Leu Gln Thr Glu Ile Gly Ser Met Val Tyr Ala Val Lys Pro Gly Asp
1 5 10 15
Gly Ser Ala Arg Glu Gln Ala Ala Ser Cys Gln Arg Val Ile Gly Gly
20 25 30
Leu Ala Asn Ile Ala Glu Glu Tyr Ala Thr Lys Arg Tyr Arg Ser Asn
35 40 45
Val Ile Asn Trp Gly Met Leu Pro Leu Gln Met Ala Glu Val Pro Thr
50 55 60
Phe Glu Val Gly Asp Tyr Ile Tyr Ile Leu Gly Phe Lys Ala Ala Lys
65 70 75 80
Tyr Ser Pro Gly Thr Ala Phe Thr Val Tyr Ala Ile Ser Gly Tyr Gly
85 90 95
Pro Arg Ile
99

<210> 1051 -
<211> 114
<212>Amino acid
<213> Homo sapiens.

<400> 1051
Thr Leu Glu Asp Leu Leu Met Ala Leu Asp Gly Glu Gln His Leu Gln
1 5 10 15
Gln Gln Val Ser Glu Lys Val Leu Ala Asp Asn Val Leu Ile Ala Pro
20 25 30
Gly Ser Val Lys Pro Asp Ala Thr Phe Trp Ser Ala Leu Ile Gln Asp
35 40 45
Arg Tyr Asn Val Met Thr Cys Ile Glu Lys Asp Ala Cys Val Leu Val
50 55 60
Glu Gln Asp Leu Asn Ser Asp Gly Gln Ala Glu Arg Ile Leu Phe Ala
65 70 75 80
Phe Asn Asp Asp Arg Val Ile Val Tyr Gly Phe Asp Ser Asp Arg Lys
85 90 95
Glu Trp Asp Ala Leu Asp Met Ser Leu Leu Pro Asn Glu Ile Thr Lys
100 105 110
Glu Lys
114

<210> 1052
<211> 210
<212>Amino acid
<213> Homo sapiens

<400> 1052

Glu Ser Asn Ser Arg Cys Arg Lys Met Pro Gly Glu Arg Cys Arg Gly
 1 5 10 15
 Gly Pro Ala Arg Leu Ser Leu Leu Leu Asp Leu Pro Thr Arg Pro Leu
 20 25 30
 Pro His Pro Arg Gln Val Ile Asp Phe Gly Ser Ala Ser Ile Phe Ser
 35 40 45
 Glu Val Arg Tyr Val Lys Glu Pro Tyr Ile Gln Ser Arg Phe Tyr Arg
 50 55 60
 Ala Pro Glu Ile Leu Leu Gly Leu Pro Phe Cys Glu Lys Val Asp Val
 65 70 75 80
 Trp Ser Leu Gly Cys Val Met Asp Glu Leu His Leu Gly Trp Pro Leu
 85 90 95
 Tyr Pro Gly Asn Asn Glu Tyr Asp Gln Val Arg Tyr Ile Cys Glu Thr
 100 105 110
 Gln Gly Leu Pro Lys Pro His Leu Leu His Ala Ala Cys Lys Ala His
 115 120 125
 His Phe Phe Lys Arg Asn Pro His Pro Asp Ala Ala Asn Pro Trp Gln
 130 135 140
 Leu Lys Ser Ser Ala Asp Tyr Leu Ala Glu Thr Lys Val Arg Pro Leu
 145 150 155 160
 Glu Arg Arg Lys Tyr Met Leu Lys Ser Leu Asp Gln Ile Glu Thr Val
 165 170 175
 Asn Gly Gly Ser Val Ala Ser Arg Leu Thr Phe Pro Asp Arg Glu Ala
 180 185 190
 Leu Ala Glu His Ala Asp Leu Lys Ser Met Val Glu Leu Met Lys Arg
 195 200 205
 Leu Leu
 210

<210> 1053
 <211> 100
 <212>Amino acid
 <213> Homo sapiens

<400> 1053
 Arg Leu Val Lys Lys Arg Val Glu Cys Arg Gln Cys Gly Lys Ala Gly
 1 5 10 15
 Arg Asn Gln Ser Thr Leu Lys Thr His Met Arg Ser His Thr Gly Glu
 20 25 30
 Lys Pro Tyr Glu Cys Asp His Cys Gly Lys Ala Phe Ser Ile Gly Ser
 35 40 45
 Asn Leu Asn Val His Arg Arg Ile His Thr Gly Glu Lys Pro Tyr Glu
 50 55 60
 Cys Leu Val Cys Gly Glu Ala Phe Ser Asp His Ser Ser Leu Arg Ser
 65 70 75 80
 His Val Lys Thr His Arg Gly Glu Lys Leu Phe Val Ser Ser Val Trp
 85 90 95
 Lys Arg Leu Gln
 100

<210> 1054
 <211> 194
 <212>Amino acid
 <213> Homo sapiens

<400> 1054
 Cys Gly Pro Gly Phe Ser Leu Ser Phe Phe Leu Arg Trp Ser Phe
 1 5 10 15
 Ala Leu Val Ala Gln Ala Gly Val Gln Trp His Asp Leu Gly Ser Leu
 20 25 30
 Gln Pro Pro Ala Pro Gly Phe Lys Arg Phe Ser Ser Leu Ser Leu Leu
 35 40 45
 Ser Arg Trp Asp Tyr Arg His Ala His Ala Arg Leu Ile Phe Val Phe
 50 55 60
 Leu Val Glu Met Gly Phe Leu His Val Gly Gln Ala Gly Leu Glu Leu
 65 70 75 80
 Pro Thr Ser Gly Asp Pro Pro Thr Ser Ala Ser Gln Ser Ala Arg Ile
 85 90 95
 Thr Gly Val Thr Thr Pro Leu Gly Thr Phe Phe Leu Arg Trp
 100 105 110
 Ser Phe Ala Leu Val Ala Gln Ala Gly Gly Gln Cys Leu Asp Leu Gly
 115 120 125
 Ser Leu Gln Leu Pro Pro Pro Gly Phe Lys Arg Leu Val Cys His Phe
 130 135 140
 Gln Thr Pro Gln Lys His Arg Cys Ser Cys Gln Ala Pro Gly Asp Cys.
 145 150 155 160
 Leu Gln Glu Ser Phe Val Met Thr Gly Cys Val Leu Arg Thr Val Ser
 165 170 175
 Glu Ser Val Gln Arg Ala Asn Ala Gly Ala Gly Ala Glu Thr Val Gln
 180 185 190
 Gly Leu
 194

<210> 1055
<211> 351
<212> Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(351)
<223> X = any amino acid or stop code

<400> 1055
 Met Gly Asn Ala Ala Ala Ala Lys Lys Gly Ser Glu Gln Glu Ser Val
 1 5 10 15
 Lys Glu Phe Leu Ala Lys Ala Lys Glu Asp Phe Leu Lys Lys Trp Glu
 20 25 30
 Ser Pro Ala Gln Asn Thr Ala His Leu Asp Gln Phe Glu Arg Ile Lys
 35 40 45
 Thr Leu Gly Thr Gly Ser Phe Gly Arg Val Met Leu Val Lys His Lys
 50 55 60
 Glu Thr Gly Asn His Tyr Ala Met Lys Ile Leu Asp Xaa Gln Lys Val
 65 70 75 80
 Gly Lys Leu Lys Gln Ile Glu His Thr Leu Asn Glu Lys Arg Ile Leu
 85 90 95
 Gln Ala Val Asn Phe Pro Phe Leu Val Lys Leu Glu Phe Ser Phe Lys
 100 105 110
 Asp Asn Ser Asn Leu Tyr Met Val Met Glu Tyr Val Pro Gly Gly Glu
 115 120 125
 Met Phe Ser His Leu Arg Arg Ile Gly Arg Phe Ser Glu Pro His Ala
 130 135 140
 Arg Phe Tyr Ala Ala Gln Ile Val Leu Thr Phe Glu Tyr Leu His Ser

| | | | |
|---|-----|-----|-----|
| 145 | 150 | 155 | 160 |
| Leu Asp Leu Ile Tyr Arg Asp Leu Lys Pro Glu Asn Leu Leu Ile Asp | | | |
| 165 | 170 | 175 | |
| Gln Gln Gly Tyr Ile Gln Val Thr Asp Phe Gly Phe Ala Lys Arg Val | | | |
| 180 | 185 | 190 | |
| Lys Gly Arg Thr Trp Thr Leu Cys Gly Thr Pro Glu Tyr Leu Ala Pro | | | |
| 195 | 200 | 205 | |
| Glu Ile Ile Leu Ser Lys Gly Tyr Asn Lys Ala Val Asp Trp Trp Ala | | | |
| 210 | 215 | 220 | |
| Leu Gly Val Leu Ile Tyr Glu Met Ala Ala Gly Tyr Pro Pro Phe Phe | | | |
| 225 | 230 | 235 | 240 |
| Ala Asp Gln Pro Ile Gln Ile Tyr Glu Lys Ile Val Ser Gly Lys Val | | | |
| 245 | 250 | 255 | |
| Arg Phe Pro Ser His Phe Ser Ser Asp Leu Lys Asp Leu Leu Arg Asn | | | |
| 260 | 265 | 270 | |
| Leu Leu Gln Val Asp Leu Thr Lys Arg Phe Gly Asn Leu Lys Asn Gly | | | |
| 275 | 280 | 285 | |
| Val Asn Asp Ile Lys Asn His Lys Trp Phe Ala Thr Thr Asp Trp Ile | | | |
| 290 | 295 | 300 | |
| Ala Ile Tyr Gln Arg Lys Val Glu Ala Pro Phe Ile Pro Lys Phe Lys | | | |
| 305 | 310 | 315 | 320 |
| Gly Pro Gly Asp Thr Ser Asn Phe Asp Asp Tyr Glu Glu Glu Ile | | | |
| 325 | 330 | 335 | |
| Arg Val Ser Ile Asn Glu Lys Phe Gly Lys Glu Phe Ser Glu Phe | | | |
| 340 | 345 | 350 | 351 |

<210> 1056
<211> 136
<212> Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(136)
<223> X = any amino acid or stop code

| |
|---|
| <400> 1056 |
| Ser Ser Ser Arg Ser Ser His Gly Asp Ser Pro Pro His Ser Gln Thr |
| 1 5 10 15 |
| Pro Cys Asp Thr Asn Arg Gly Leu Asp Thr Lys His Xaa Asp Ser Gln |
| 20 25 30 |
| Ser Ile Glu Glu Lys Asp Ser Ser Gln Ser Glu Xaa Asn Arg Ile Glu |
| 35 40 45 |
| Arg Arg Lys Glu Val Glu Arg Ile Leu Gln Thr Asn Ser Asp Tyr Met |
| 50 55 60 |
| Xaa His Trp Ser Asn Xaa Pro Glu Asn Ile Leu Pro Lys Lys Phe Phe |
| 65 70 75 80 |
| Ser Lys His Gln Lys Cys Thr Ala Thr Leu Ser Met Arg Asn Thr Ser |
| 85 90 95 |
| Ile Met Lys Lys Glu Gly Leu Phe Xaa Ala Gln Phe Pro Ser Leu Leu |
| 100 105 110 |
| Leu Ser His Leu Pro Ala Val Gly Leu Gly Ile Tyr Thr Gly Thr His |
| 115 120 125 |
| Leu Thr Thr Ser Thr Ser Thr Phe |
| 130 135 136 |

<210> 1057
<211> 79

<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(79)
<223> X = any amino acid or stop code

<400> 1057
Thr Phe His Ser Ser Leu Glu Lys Asn Ile Leu Gln Pro Cys Arg Xaa
1 5 10 15
Arg Arg Ala Ile Cys Leu Pro Leu Leu Leu Xaa Pro Ser Val Pro Leu
20 25 30
Leu Ala Pro Gln Tyr Phe Ser Asp Leu Arg Asn Ser Ile Val Asn Ser
35 40 45
Gln Pro Pro Glu Lys Gln Gln Ala Met His Leu Cys Phe Glu Asn Leu
50 55 60
Met Glu Gly Ile Glu Arg Asn Leu Leu Thr Lys Asn Arg Asp Arg
65 70 75 79

<210> 1058
<211> 458
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(458)
<223> X = any amino acid or stop code

<400> 1058
Gly Thr Ser Gly Val Gln Gln Glu Ile Ser Arg Leu Thr Asn Glu Asn
1 5 10 15
Leu Asp Leu Lys Glu Leu Val Glu Lys Leu Glu Lys Asn Glu Arg Lys
20 25 30
Leu Lys Lys Gln Leu Lys Ile Tyr Met Lys Lys Ala Gln Asp Leu Glu
35 40 45
Ala Ala Gln Ala Leu Ala Gln Ser Glu Arg Lys Arg His Glu Leu Asn
50 55 60
Arg Gln Val Thr Val Gln Arg Lys Glu Lys Asp Phe Gln Gly Met Leu
65 70 75 80
Glu Tyr His Lys Glu Asp Glu Ala Leu Leu Ile Arg Asn Leu Val Thr
85 90 95
Asp Leu Lys Pro Gln Met Leu Ser Gly Thr Val Pro Cys Leu Pro Ala
100 105 110
Tyr Ile Leu Tyr Met Cys Ile Arg His Ala Asp Tyr Thr Asn Asp Asp
115 120 125
Leu Lys Val His Ser Leu Leu Thr Ser Thr Ile Asn Gly Ile Lys Lys
130 135 140
Val Leu Lys Lys His Asn Asp Asp Phe Glu Met Thr Ser Phe Trp Leu
145 150 155 160
Ser Asn Thr Cys Arg Leu Leu His Cys Leu Lys Gln Tyr Ser Gly Asp
165 170 175
Glu Gly Phe Met Thr Gln Asn Thr Ala Lys Gln Asn Glu His Cys Leu
180 185 190

Lys Asn Phe Asp Leu Thr Glu Tyr Arg Gln Val Leu Ser Asp Leu Ser
 195 200 205
 Ile Gln Ile Tyr Gln Gln Leu Ile Lys Ile Ala Glu Gly Val Leu Gln
 210 215 220
 Pro Met Ile Val Ser Ala Met Leu Glu Asn Xaa Ser Ile Gln Gly Leu
 225 230 235 240
 Ser Gly Val Lys Pro Thr Gly Ser Gln Lys His Ser Ser Ser Met Ala
 245 250 255
 Asp Glu Asp Asn Ser Tyr Arg Leu Glu Ala Ile Ile Arg Gln Met Asn
 260 265 270
 Ala Phe His Thr Val Met Cys Asp Gln Gly Leu Asp Pro Glu Ile Ile
 275 280 285
 Leu Gln Val Phe Lys Gln Leu Phe Tyr Met Ile Asn Ala Val Thr Leu
 290 295 300
 Asn Asp Leu Leu Leu Arg Lys Asp Val Cys Ser Trp Ser Thr Gly Met
 305 310 315 320
 Gln Leu Arg Tyr Asn Ile Ser Gln Leu Glu Trp Leu Arg Gly Arg
 325 330 335
 Asn Leu His Gln Ser Gly Ala Val Gln Thr Met Glu Pro Leu Ile Gln
 340 345 350
 Ala Ala Gln Leu Leu Gln Leu Lys Lys Lys Thr Gln Glu Asp Ala Glu
 355 360 365
 Ala Ile Cys Ser Leu Cys Thr Ser Leu Ser Thr Gln Gln Ile Val Lys
 370 375 380
 Ile Leu Asn Leu Tyr Thr Pro Leu Asn Glu Phe Glu Glu Arg Val Thr
 385 390 395 400
 Val Ala Phe Ile Arg Thr Ile Gln Ala Gln Leu Gln Glu Arg Asn Asp
 405 410 415
 Pro Gln Gln Leu Leu Leu Asp Ala Lys His Met Phe Pro Val Leu Phe
 420 425 430
 Pro Phe Asn Pro Ser Ser Leu Thr Met Asp Ser Ile His Ile Pro Ala
 435 440 445
 Cys Leu Asn Leu Glu Phe Leu Asn Glu Val
 450 455 458

<210> 1059
<211> 82
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(82)
<223> X = any amino acid or stop code

<400> 1059
His Glu Glu Asn Thr Ile Leu Lys Ala Ala Glu Val Gln Val Pro Pro
 1 5 10 15
Lys Xaa Val Val Thr Pro Glu Ala Lys Ala Phe Ile Xaa Arg Cys Leu
 20 25 30
Ala Tyr Gln Lys Glu Asp Cys Ile Asp Ala Gln Gln Leu Ala Cys Asp
 35 40 45
Pro Tyr Leu Leu His Tyr Ile Gln Lys Leu Val Phe Val Ser Ser Pro
 50 55 60
Ala Gly Ala Ala Ile Ala Ser Thr Phe Gly Val Ser Asn Ser Cys Ser
 65 70 75 80
Ser Asn
 82

<210> 1060
<211> 277
<212>Amino acid
<213> Homo sapiens

<400> 1060
Gly Thr Thr Asp Glu Ile Met Thr Arg Trp Ala Arg Val Ser Thr Thr
1 5 10 15
Tyr Asn Lys Arg Pro Leu Pro Ala Thr Ser Trp Glu Asp Met Lys Lys
20 25 30
Gly Ser Phe Glu Gly Thr Ser Gln Asn Leu Pro Lys Arg Lys Gln Leu
35 40 45
Glu Ala Asn Arg Leu Ser Leu Lys Asn Asp Ala Pro Gln Ala Lys His
50 55 60
Lys Lys Asn Lys Lys Lys Glu Tyr Leu Asn Glu Asp Val Asn Gly
65 70 75 80
Phe Met Glu Tyr Leu Arg Gln Asn Ser Gln Met Val His Asn Gly Gln
85 90 95
Ile Ile Ala Thr Asp Ser Glu Glu Val Arg Glu Glu Ile Ala Val Ala
100 105 110
Leu Lys Lys Asp Ser Arg Arg Glu Gly Arg Arg Leu Lys Arg Gln Ala
115 120 125
Ala Lys Lys Asn Ala Met Val Cys Phe His Cys Arg Lys Pro Gly His
130 135 140
Gly Ile Ala Asp Cys Pro Ala Ala Leu Glu Asn Gln Asp Met Gly Thr
145 150 155 160
Gly Ile Cys Tyr Arg Cys Gly Ser Thr Glu His Glu Ile Thr Lys Cys
165 170 175
Lys Ala Lys Val Asp Pro Ala Leu Gly Glu Phe Pro Phe Ala Lys Cys
180 185 190
Phe Val Cys Gly Glu Met Gly His Leu Ser Arg Ser Cys Pro Asp Asn
195 200 205
Pro Lys Gly Leu Tyr Ala Asp Gly Gly Cys Lys Leu Cys Gly Ser
210 215 220
Val Glu His Leu Lys Lys Asp Cys Pro Glu Ser Gln Asn Ser Glu Arg
225 230 235 240
Met Val Thr Val Gly Arg Trp Ala Lys Gly Met Ser Ala Asp Tyr Glu
245 250 255
Glu Ile Leu Asp Val Pro Lys Pro Gln Lys Pro Lys Thr Lys Ile Pro
260 265 270
Lys Val Val Asn Phe
275 277

<210> 1061
<211> 95
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(95)
<223> X = any amino acid or stop code

<400> 1061

| | | | |
|---|----|----|----|
| Asp His Val Arg Lys Ser Leu Leu Lys Asn Arg Ala Glu Asn Ile Val | | | |
| 1 | 5 | 10 | 15 |
| Asn Ile Phe Lys Cys Asn Val Val Ser Leu Pro Asn Leu Pro Ala Phe | | | |
| 20 | 25 | 30 | |
| Gly Gln Ala Gln Trp Leu Thr Pro Val Ile Pro Ala Leu Trp Glu Ala | | | |
| 35 | 40 | 45 | |
| Glu Val Gly Gly Ser Xaa Gly Gln Glu Ile Glu Thr Ile Leu Ala Asn | | | |
| 50 | 55 | 60 | |
| Ala Val Lys Ser Pro Phe Leu Leu Lys Ile Gln Lys Lys Lys Ile Ser | | | |
| 65 | 70 | 75 | 80 |
| Arg Ala Trp Trp Arg Ala Pro Val Ser Pro Arg Tyr Ser Gly Gly | | | |
| 85 | 90 | 95 | |

<210> 1062
<211> 259
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(259)
<223> X = any amino acid or stop code

| | | | |
|---|-----|-----|-----|
| <400> 1062 | | | |
| Ser Asp Ala Trp Ala Asp Ala Trp Ala Arg Ser Leu Ser Val Ser Pro | | | |
| 1 | 5 | 10 | 15 |
| Ser Ser Tyr Pro Glu Leu His Thr Glu Val Pro Leu Ser Val Leu Ile | | | |
| 20 | 25 | 30 | |
| Leu Gly Leu Leu Val Val Phe Ile Leu Ser Val Cys Phe Gly Ala Gly | | | |
| 35 | 40 | 45 | |
| Leu Phe Val Phe Val Leu Lys Arg Arg Lys Gly Val Pro Ser Val Pro | | | |
| 50 | 55 | 60 | |
| Arg Asn Thr Asn Asn Leu Asp Val Ser Ser Phe Gln Leu Gln Tyr Gly | | | |
| 65 | 70 | 75 | 80 |
| Ser Tyr Asn Thr Glu Thr His Asp Lys Thr Asp Gly His Val Tyr Asn | | | |
| 85 | 90 | 95 | |
| Tyr Ile Pro Pro Pro Val Val Gln Met Cys Gln Asn Pro Ile Tyr Met | | | |
| 100 | 105 | 110 | |
| Ala Gly Arg Glu Gly Arg Pro Ser Ser Leu Leu Pro Lys Pro Gly Lys | | | |
| 115 | 120 | 125 | |
| Glu Phe Gln Leu Leu Gly Asn Leu Glu Glu Lys Lys Glu Glu Pro Ala | | | |
| 130 | 135 | 140 | |
| Thr Pro Ala Tyr Thr Ile Ser Ala Thr Glu Leu Leu Glu Lys Gln Ala | | | |
| 145 | 150 | 155 | 160 |
| Thr Pro Arg Glu Pro Glu Leu Leu Tyr Gln Asn Ile Ala Glu Pro Ser | | | |
| 165 | 170 | 175 | |
| Gln Gly Thr Ser Thr Ala Gln Ala Xaa Ser Thr Ile Thr Phe Val Pro | | | |
| 180 | 185 | 190 | |
| Tyr Leu Lys Gly Gln Phe Ala Pro Ser Tyr Glu Ser Arg Arg Gln Asn | | | |
| 195 | 200 | 205 | |
| Gln Asp Arg Ile Asn Lys Thr Val Leu Tyr Gly Thr Pro Arg Lys Cys | | | |
| 210 | 215 | 220 | |
| Phe Val Gly Gln Ser Lys Pro Asn His Pro Leu Leu Gln Ala Lys Pro | | | |
| 225 | 230 | 235 | 240 |
| Gln Ser Glu Pro Asp Tyr Leu Glu Val Leu Glu Lys Gln Thr Ala Ile | | | |
| 245 | 250 | 255 | |
| Ser Gln Leu | | | |
| 259 | | | |

<210> 1063
<211> 498
<212>Amino acid
<213> Homo sapiens

<400> 1063
Ala Leu Cys His Ile Ala Val Gly Gln Gln Met Asn Leu His Trp Leu
1 5 10 15
His Lys Ile Gly Leu Val Val Ile Leu Ala Ser Thr Val Val Ala Met
20 25 30
Ser Ala Val Ala Gln Leu Trp Glu Asp Glu Trp Glu Val Leu Leu Ile
35 40 45
Ser Leu Gln Gly Thr Ala Pro Phe Leu His Val Gly Ala Val Ala Ala
50 55 60
Val Thr Met Leu Ser Trp Ile Val Ala Gly Gln Phe Ala Arg Ala Glu
65 70 75 80
Arg Thr Ser Ser Gln Val Thr Ile Leu Cys Thr Phe Phe Thr Val Val
85 90 95
Phe Ala Leu Tyr Ile Ala Pro Leu Thr Ile Ser Ser Pro Cys Ile Met
100 105 110
Glu Lys Lys Asp Leu Gly Pro Lys Pro Ala Leu Ile Gly His Arg Gly
115 120 125
Ala Pro Met Leu Ala Pro Glu His Thr Leu Met Ser Phe Arg Lys Ala
130 135 140
Leu Glu Gln Lys Leu Tyr Gly Leu Gln Ala Asp Ile Thr Ile Ser Leu
145 150 155 160
Asp Gly Val Pro Phe Leu Met His Asp Thr Thr Leu Arg Arg Arg Thr Thr
165 170 175
Asn Val Glu Glu Phe Pro Glu Leu Ala Arg Arg Pro Ala Ser Met
180 185 190
Leu Asn Trp Thr Thr Leu Gln Arg Leu Asn Ala Gly Gln Trp Phe Leu
195 200 205
Lys Thr Asp Pro Phe Trp Thr Ala Ser Ser Leu Ser Pro Ser Asp His
210 215 220
Arg Glu Ala Gln Asn Gln Ser Ile Cys Ser Leu Ala Glu Leu Leu Glu
225 230 235 240
Leu Ala Lys Gly Asn Ala Thr Leu Leu Leu Asn Leu Arg Asp Pro Pro
245 250 255
Arg Glu His Pro Tyr Arg Ser Ser Phe Ile Asn Val Thr Leu Glu Ala
260 265 270
Val Leu His Ser Gly Phe Pro Gln His Gln Val Met Trp Leu Pro Ser
275 280 285
Arg Gln Arg Pro Leu Val Arg Lys Val Ala Pro Gly Phe Gln Gln Thr
290 295 300
Ser Gly Ser Lys Glu Ala Val Ala Ser Leu Arg Arg Gly His Ile Gln
305 310 315 320
Arg Leu Asn Leu Arg Tyr Thr Gln Val Ser Arg Gln Glu Leu Arg Asp
325 330 335
Tyr Ala Ser Trp Asn Leu Ser Val Asn Leu Tyr Thr Val Asn Ala Pro
340 345 350
Trp Leu Phe Ser Leu Leu Trp Cys Ala Gly Val Pro Ser Val Thr Ser
355 360 365
Asp Asn Ser His Thr Leu Ser Gln Val Pro Ser Pro Leu Trp Ile Met
370 375 380
Pro Pro Asp Glu Tyr Cys Leu Met Trp Val Thr Ala Asp Leu Val Ser
385 390 395 400
Phe Thr Leu Ile Val Gly Ile Phe Val Leu Gln Lys Trp Arg Leu Gly
405 410 415
Gly Ile Arg Ser Tyr Asn Pro Glu Gln Ile Met Leu Ser Ala Ala Val

| | | |
|---|----------------------------------|-----|
| Arg Arg Thr Ser Arg Asp Val Ser Ile Met Lys Glu Lys Leu Ile Phe | 420 425 | 430 |
| 435 | 440 | 445 |
| Ser Glu Ile Ser Asp Gly Val Glu Val Ser Asp Val Leu Ser Val Cys | 450 455 | 460 |
| 465 | 470 | 475 |
| Ser Asp Asn Ser Tyr Asp Thr Tyr Ala Asn Ser Thr Ala Thr Pro Val | 480 | |
| Gly Pro Arg Gly Gly Ser His Thr Lys Thr Leu Ile Glu Arg Ser | 485 | 495 |
| Gly Arg | | |
| 498 | | |

<210> 1064
<211> 374
<212>Amino acid
<213> Homo sapiens

| | | |
|---|-----|---|
| <400> 1064 | | |
| Asn Ser Ala Asp Tyr Gly Asp Gly Pro Asp Ser Ser Asp Ala Asp Pro | 1 | 5 10 15 |
| Asp Ser Gly Thr Glu Glu Gly Val Leu Asp Phe Ser Asp Pro Phe Ser | 20 | 25 30 |
| Thr Glu Val Lys Pro Arg Ile Leu Leu Met Gly Leu Arg Arg Ser Gly | 35 | 40 45 |
| Lys Ser Ser Ile Gln Lys Val Val Phe His Lys Met Ser Pro Asn Glu | 50 | 55 60 |
| Thr Leu Phe Leu Glu Ser Thr Asn Lys Ile Cys Arg Glu Asp Val Ser | 65 | 70 75 80 |
| Asn Ser Ser Phe Val Asn Phe Gln Ile Trp Asp Phe Pro Gly Gln Ile | 85 | 90 95 |
| Asp Phe Phe Asp Pro Thr Phe Asp Tyr Glu Met Ile Phe Arg Gly Thr | 100 | 105 110 |
| Gly Ala Leu Ile Phe Val Ile Asp Ser Gln Asp Asp Tyr Met Glu Ala | 115 | 120 125 |
| Leu Ala Arg Leu His Leu Thr Val Thr Arg Ala Tyr Lys Val Asn Thr | 130 | 135 140 |
| Asp Ile Asn Phe Glu Val Phe Ile His Lys Val Asp Gly Leu Ser Asp | 145 | 150 155 160 |
| Asp His Lys Ile Glu Thr Gln Arg Asp Ile His Gln Arg Ala Asn Asp | 165 | 170 175 |
| Asp Leu Ala Asp Ala Gly Leu Glu Lys Ile His Leu Ser Phe Tyr Leu | 180 | 185 190 |
| Thr Ser Ile Tyr Asp His Ser Ile Phe Glu Ala Phe Ser Lys Val Val | 195 | 200 205 |
| Gln Lys Leu Ile Pro Gln Leu Pro Thr Leu Glu Asn Leu Leu Asn Ile | 210 | 215 220 |
| Phe Ile Ser Asn Ser Gly Ile Glu Lys Ala Phe Leu Phe Asp Val Val | 225 | 230 235 240 |
| Ser Lys Ile Tyr Ile Ala Thr Asp Ser Thr Pro Val Asp Met Gln Thr | 245 | 250 255 |
| Tyr Glu Leu Cys Cys Asp Met Ile Asp Val Val Ile Asp Ile Ser Cys | 260 | 265 270 |
| Ile Tyr Gly Leu Lys Glu Asp Gly Ala Gly Thr Pro Tyr Asp Lys Glu | 275 | 280 285 |
| Ser Thr Ala Ile Ile Lys Leu Asn Asn Thr Thr Val Leu Tyr Leu Lys | 290 | 295 300 |
| Glu Val Thr Lys Phe Leu Ala Leu Val Cys Phe Val Arg Glu Glu Ser | 305 | 310 315 320 |
| Phe Glu Arg Lys Gly Leu Ile Asp Tyr Asn Phe His Cys Phe Arg Lys | | |

| | | | | | |
|---|-----|--|-----|--|-----|
| | 325 | | 330 | | 335 |
| Ala Ile His Glu Val Phe Glu Val Arg Met Lys Val Val Lys Ser Arg | 340 | | 345 | | 350 |
| Lys Val Gln Asn Arg Leu Gln Lys Lys Lys Arg Ala Thr Pro Asn Gly | 355 | | 360 | | 365 |
| Thr Pro Arg Val Leu Leu | 370 | | 374 | | |

<210> 1065
 <211> 278
 <212>Amino acid
 <213> Homo sapiens

| | | | | | |
|---|------------|---|-----|----|-----|
| | <400> 1065 | | | | |
| Arg Thr Arg Gly Arg Asp Pro Gly Ala Gly Phe Arg Arg Thr Ala Asn | 1 | 5 | 10 | 15 | |
| Lys Arg Cys Cys Arg Arg Arg Phe Leu Ile Gly Cys Gly Trp Leu Pro | 20 | | 25 | | 30 |
| Leu Arg Ser Asp Trp Pro Leu Val Ser Lys Met Leu Ser Lys Gly Leu | 35 | | 40 | | 45 |
| Lys Arg Lys Arg Glu Glu Glu Glu Lys Glu Pro Leu Ala Val Asp | 50 | | 55 | | 60 |
| Ser Trp Trp Leu Asp Pro Gly His Ala Ala Val Ala Gln Ala Pro Pro | 65 | | 70 | | 75 |
| Ala Val Ala Ser Ser Leu Phe Asp Leu Ser Val Leu Lys Leu His | 85 | | 90 | | 95 |
| His Ser Leu Gln Gln Ser Glu Pro Asp Leu Arg His Leu Val Leu Val | 100 | | 105 | | 110 |
| Val Asn Thr Leu Arg Arg Ile Gln Ala Ser Met Ala Pro Ala Ala Ala | 115 | | 120 | | 125 |
| Leu Pro Pro Val Pro Ser Pro Ala Ala Pro Ser Val Ala Asp Asn | 130 | | 135 | | 140 |
| Leu Leu Ala Ser Ser Asp Ala Ala Leu Ser Ala Ser Met Ala Ser Leu | 145 | | 150 | | 155 |
| Leu Glu Asp Leu Ser His Ile Glu Gly Leu Ser Gln Ala Pro Gln Pro | 165 | | 170 | | 175 |
| Leu Ala Asp Glu Gly Pro Pro Gly Arg Ser Ile Gly Gly Ala Ala Pro | 180 | | 185 | | 190 |
| Ser Leu Gly Ala Leu Asp Leu Gly Pro Ala Thr Gly Cys Leu Leu | 195 | | 200 | | 205 |
| Asp Asp Gly Leu Glu Gly Leu Phe Glu Asp Ile Asp Thr Ser Met Tyr | 210 | | 215 | | 220 |
| Asp Asn Glu Leu Trp Ala Pro Ala Ser Glu Gly Leu Lys Pro Gly Pro | 225 | | 230 | | 235 |
| Glu Asp Gly Pro Gly Lys Glu Glu Ala Pro Glu Leu Asp Glu Ala Glu | 245 | | 250 | | 255 |
| Leu Asp Tyr Leu Met Asp Val Leu Val Gly Thr Gln Ala Leu Glu Arg | 260 | | 265 | | 270 |
| Pro Pro Gly Pro Gly Arg | 275 | | 278 | | |

<210> 1066
 <211> 502
 <212>Amino acid
 <213> Homo sapiens

<220>
 <221> misc_feature

<222> (1) . . . (502)
 <223> X = any amino acid or stop code

<400> 1066
 Leu Gln Glu Val Lys Ala Arg Arg Asn Thr Leu His Lys Glu Lys Asp
 1 5 10 15
 His Leu Val Asn Asp Tyr Glu Gln Asn Met Lys Leu Leu Gln Thr Lys
 20 25 30
 Tyr Asp Ala Asp Ile Asn Leu Leu Lys Gln Glu His Ala Leu Ser Ala
 35 40 45
 Ser Lys Ala Ser Ser Met Ile Glu Glu Leu Glu Gln Asn Val Cys Gln
 50 55 60
 Leu Lys Gln Gln Leu Gln Glu Ser Glu Leu Gln Arg Lys Gln Gln Leu
 65 70 75 80
 Arg Asp Gln Glu Asn Lys Phe Gln Met Glu Lys Ser His Leu Lys His
 85 90 95
 Ile Tyr Glu Lys Lys Ala His Asp Leu Gln Ser Glu Leu Asp Lys Gly
 100 105 110
 Lys Glu Asp Thr Gln Lys Lys Ile His Lys Phe Glu Glu Ala Leu Lys
 115 120 125
 Trp Lys Lys Trp Arg Gln Ile Xaa Leu Asp Pro Asn Leu Leu Arg Glu
 130 135 140
 Lys Gln Ser Lys Glu Phe Leu Trp Gln Leu Glu Asp Ile Arg Gln Arg
 145 150 155 160
 Tyr Glu Gln Gln Ile Val Glu Leu Lys Leu Glu His Glu Gln Glu Lys
 165 170 175
 Thr His Leu Leu Gln His Asn Ala Glu Lys Asp Ser Leu Val Arg
 180 185 190
 Asp His Glu Arg Glu Ile Glu Asn Leu Glu Lys Gln Leu Arg Ala Ala
 195 200 205
 Asn Met Glu His Glu Asn Gln Ile Gln Glu Phe Lys Lys Arg Asp Ala
 210 215 220
 Gln Val Ile Ala Asp Met Glu Ala Gln Val His Lys Leu Arg Glu Glu
 225 230 235 240
 Leu Ile Asn Val Asn Ser Gln Arg Lys Gln Gln Leu Val Glu Leu Gly
 245 250 255
 Leu Leu Arg Glu Glu Glu Lys Gln Arg Ala Thr Arg Glu His Glu Ile
 260 265 270
 Val Val Asn Lys Leu Lys Ala Glu Ser Glu Lys Met Lys Ile Glu Leu
 275 280 285
 Lys Lys Thr His Ala Ala Glu Thr Glu Met Thr Leu Glu Lys Ala Asn
 290 295 300
 Ser Lys Leu Lys Gln Ile Glu Lys Glu Tyr Thr Gln Lys Leu Ala Lys
 305 310 315 320
 Ser Ser Gln Ile Ala Glu Leu Gln Thr Thr Ile Ser Ser Leu Lys
 325 330 335
 Glu Glu Asn Ser Gln Gln Leu Ala Ala Glu Arg Arg Leu Gln Asp
 340 345 350
 Val Arg Gln Lys Phe Glu Asp Glu Lys Lys Gln Leu Ile Arg Asp Asn
 355 360 365
 Asp Gln Ala Ile Lys Val Leu Gln Asp Glu Leu Glu Asn Arg Ser Asn
 370 375 380
 Gln Val Arg Cys Ala Glu Lys Lys Leu Gln His Lys Glu Leu Glu Ser
 385 390 395 400
 Gln Glu Gln Ile Thr Tyr Ile Arg Gln Glu Tyr Glu Thr Lys Leu Lys
 405 410 415
 Gly Leu Met Pro Ala Ser Leu Arg Gln Glu Leu Glu Asp Thr Ile Ser
 420 425 430
 Ser Leu Lys Ser Gln Val Asn Phe Leu Gln Lys Arg Ala Ser Ile Leu
 435 440 445

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gln | Glu | Glu | Arg | Asp | Tyr | Ile | Ser | Arg | Gln | Lys | Val | Gln | Pro | Ile | Ser |
| 450 | | | | | | | | | 455 | | | | | 460 | |
| Arg | Xaa | Leu | His | Glu | Arg | Met | Gln | Arg | Met | Arg | Ile | Ser | Arg | Leu | Cys |
| 465 | | | | | | | | | 470 | | | | | 475 | |
| Cys | Gly | Thr | Ser | Ser | Ser | Arg | Phe | Glu | Asp | Leu | Asp | Ile | Val | Asn | Cys |
| | | | | | | | | | 485 | | | | | 490 | |
| Glu | Ile | Ser | Gly | Ile | Phe | | | | | | | | | 495 | |
| | | | | | | | | | | | | | | | 502 |
| | | | | | | | | | | | | | | | |

<210> 1067
<211> 301
<212> Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> {1}...{301}
<223> X = any amino acid or stop code

| | | | | | | | | | | | | | | | | | | |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <400> 1067 | | | | | | | | | | | | | | | | | | |
| Val | Ile | Asn | Leu | Val | Tyr | Leu | Ile | Ser | Ser | Pro | Arg | Pro | Glu | Leu | Lys | | | |
| 1 | | | | | | | | | | | | | | 15 | | | | |
| Pro | Val | Asp | Lys | Glu | Ser | Glu | Val | Val | Met | Lys | Phe | Pro | Asp | Gly | Phe | | | |
| | | | | | | | | | | | | | | 20 | 25 | 30 | | |
| Glu | Lys | Phe | Ser | Pro | Pro | Ile | Leu | Gln | Leu | Asp | Glu | Val | Asp | Phe | Tyr | | | |
| | | | | | | | | | | | | | | 35 | 40 | 45 | | |
| Tyr | Asp | Pro | Lys | His | Val | Ile | Phe | Ser | Arg | Leu | Ser | Val | Ser | Ala | Asp | | | |
| | | | | | | | | | | | | | | 50 | 55 | 60 | | |
| Leu | Glu | Ser | Arg | Ile | Cys | Val | Val | Gly | Glu | Asn | Gly | Ala | Gly | Lys | Ser | | | |
| | | | | | | | | | | | | | | 65 | 70 | 75 | 80 | |
| Thr | Met | Leu | Lys | Leu | Leu | Leu | Gly | Asp | Leu | Ala | Pro | Val | Arg | Gly | Ile | | | |
| | | | | | | | | | | | | | | 85 | 90 | 95 | | |
| Arg | His | Ala | His | Arg | Asn | Leu | Lys | Ile | Gly | Tyr | Phe | Ser | Gln | His | His | | | |
| | | | | | | | | | | | | | | 100 | 105 | 110 | | |
| Val | Glu | Gln | Leu | Asp | Leu | Asn | Val | Gln | Cys | Leu | Trp | Glu | Leu | Ala | Gly | | | |
| | | | | | | | | | | | | | | 115 | 120 | 125 | | |
| His | Ala | Ser | Phe | Pro | Gly | Arg | Pro | Glu | Glu | Glu | Tyr | Arg | His | Gln | Leu | | | |
| | | | | | | | | | | | | | | 130 | 135 | 140 | | |
| Gly | Phe | Gly | Met | Gly | Ile | Ser | Gly | Glu | Leu | Ala | Met | Arg | Pro | Leu | Cys | | | |
| | | | | | | | | | | | | | | 145 | 150 | 155 | 160 | |
| Gln | Pro | Val | Leu | Gly | Ala | Arg | Lys | Lys | Pro | Lys | Trp | Pro | Phe | Ala | Gln | | | |
| | | | | | | | | | | | | | | 165 | 170 | 175 | | |
| Met | Asp | Tyr | Cys | Pro | Ala | Pro | Thr | Phe | Tyr | Ile | Leu | Asp | Glu | Pro | Thr | | | |
| | | | | | | | | | | | | | | 180 | 185 | 190 | | |
| Asn | His | Leu | Gly | His | Gly | Arg | Ala | Ile | Glu | Ala | Leu | Gly | Pro | Cys | Leu | | | |
| | | | | | | | | | | | | | | 195 | 200 | 205 | | |
| Gln | Thr | Ile | Ser | Gly | Val | Gly | Val | Ile | Leu | Val | Ser | His | Glu | Xaa | Ser | | | |
| | | | | | | | | | | | | | | 210 | 215 | 220 | | |
| Ala | Leu | Ser | Arg | Leu | Val | Cys | Arg | Glu | Leu | Trp | Val | Cys | Xaa | Gly | Gly | | | |
| | | | | | | | | | | | | | | 225 | 230 | 235 | 240 | |
| Gly | Val | Thr | Arg | Val | Glu | Arg | Lys | Asp | Phe | Asp | Gln | Tyr | Arg | Ala | Leu | | | |
| | | | | | | | | | | | | | | 245 | 250 | 255 | | |
| Leu | Gln | Gly | Thr | Val | Ser | Ala | Arg | Glu | Gly | Phe | Pro | Leu | Gly | Pro | Pro | | | |
| | | | | | | | | | | | | | | 260 | 265 | 270 | | |
| Arg | Leu | Lys | Asp | Ser | Pro | Arg | Asp | Met | Gly | Leu | Val | Ser | Gln | Thr | Pro | | | |
| | | | | | | | | | | | | | | 275 | 280 | 285 | | |
| Trp | Gly | His | His | Val | Gly | Tyr | Pro | Leu | Pro | Gly | Arg | Gly | | | 290 | 295 | 300 | 301 |

<210> 1068
<211> 215
<212>Amino acid
<213> Homo sapiens

<400> 1068
Cys Ser Ala Val Glu Val Lys Met Ala Ala Arg Thr Ala Phe Gly Ala
1 5 10 15
Val Cys Arg Arg Leu Trp Gln Gly Leu Gly Asn Phe Ser Val Asn Thr
20 25 30
Ser Lys Gly Asn Thr Ala Lys Asn Gly Gly Leu Leu Leu Ser Thr Asn
35 40 45
Met Lys Trp Val Gln Phe Ser Asn Leu His Val Asp Val Pro Lys Asp
50 55 60
Leu Thr Lys Pro Val Val Thr Ile Ser Asp Glu Pro Asp Ile Leu Tyr
65 70 75 80
Lys Arg Leu Ser Val Leu Val Lys Gly His Asp Lys Ala Val Leu Asp
85 90 95
Ser Tyr Glu Tyr Phe Ala Val Leu Ala Ala Lys Glu Leu Gly Ile Ser
100 105 110
Ile Lys Val His Glu Pro Pro Arg Lys Ile Glu Arg Phe Thr Leu Leu
115 120 125
Gln Ser Val His Ile Tyr Lys His Arg Val Gln Tyr Glu Met Arg
130 135 140
Thr Leu Tyr Arg Cys Leu Glu Leu Glu His Leu Thr Gly Ser Thr Ala
145 150 155 160
Asp Val Tyr Leu Glu Tyr Ile Gln Arg Asn Leu Pro Glu Gly Val Ala
165 170 175
Met Glu Val Thr Lys Phe Cys Phe Phe Ile Phe Leu Thr Gln Leu Glu
180 185 190
Gln Leu Pro Glu His Ile Lys Glu Pro Ile Trp Glu Thr Leu Ser Glu
195 200 205
Glu Lys Glu Glu Ser Lys Ser
210 215

<210> 1069
<211> 274
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(274)
<223> X = any amino acid or stop code

<400> 1069
Asp Phe Trp Asp Thr Ala Gly Gln Glu Arg Phe Gln Ser Met His Ala
1 5 10 15
Ser Tyr Tyr His Lys Thr His Ala Cys Ile Met Val Phe Asp Val Gln
20 25 30
Arg Lys Val Thr His Arg Asn Leu Ser Thr Trp Tyr Thr Glu Leu Arg
35 40 45
Glu Phe Arg Pro Glu Ile Pro Cys Ile Val Val Ala Asn Lys Ile Asp
50 55 60

Gly Gly Ala Ile Pro Ala Pro Gly Cys Xaa Gln Phe Thr Gly Asp Leu
 65 70 75 80
 Pro Ser Tyr Ile Ser Ser Ile Pro Arg Ala Gly Asn Leu Gln Xaa
 85 90 95
 Leu Val Leu Pro Pro Thr Ile Arg Tyr Asn Pro Trp Leu Val Ala Cys
 100 105 110
 Ile Leu Pro Thr Leu Xaa Arg Ser Gln Leu Ser Arg Pro Ala Leu Phe
 115 120 125
 Pro Arg His Arg Ser Leu Leu Thr Glu Leu Phe Leu Gly Pro Val Ser
 130 135 140
 Gln Ser Ser Leu Pro Ile Pro Leu Ser Gly Met Lys Ala Ser Ser Gly
 145 150 155 160
 Pro Pro Leu Gln Thr Phe Phe Pro Ser Leu Asp Arg Gln Thr Asn Val
 165 170 175
 Leu Pro Ser Leu Tyr Ala Asp Ile Asn Val Thr Gln Lys Ser Phe Asn
 180 185 190
 Phe Ala Lys Lys Phe Ser Leu Pro Leu Tyr Phe Val Ser Ala Ala Asp
 195 200 205
 Gly Thr Asn Val Val Lys Leu Phe Asn Asp Ala Ile Arg Leu Ala Val
 210 215 220
 Ser Tyr Lys Gln Asn Ser Gln Asp Phe Met Asp Glu Ile Phe Gln Glu
 225 230 235 240
 Leu Glu Asn Phe Ser Leu Glu Gln Glu Glu Asp Val Pro Asp Gln
 245 250 255
 Glu Gln Ser Ser Ser Ile Glu Thr Pro Ser Glu Glu Val Ala Ser Pro
 260 265 270
 His Ser
 274

<210> 1070
<211> 368
<212> Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(368)
<223> X = any amino acid or stop code

<400> 1070
 Gly Ala Thr Pro Leu Gly Ser Val Gly Gly Arg Thr Gly Lys Met Asp
 1 5 10 15
 Ala Ala Thr Leu Thr Tyr Asp Thr Leu Arg Phe Ala Glu Phe Glu Asp
 20 25 30
 Phe Pro Glu Thr Ser Glu Pro Val Trp Ile Leu Gly Arg Lys Tyr Ser
 35 40 45
 Ile Phe Thr Glu Lys Asp Glu Ile Leu Ser Asp Val Ala Ser Arg Leu
 50 55 60
 Trp Phe Thr Tyr Arg Lys Asn Phe Pro Ala Ile Gly Gly Thr Gly Pro
 65 70 75 80
 Thr Ser Asp Thr Gly Trp Gly Cys Met Leu Arg Cys Gly Gln Met Ile
 85 90 95
 Phe Ala Gln Ala Leu Val Cys Arg His Leu Gly Arg Asp Trp Arg Trp
 100 105 110
 Thr Gln Arg Lys Arg Gln Pro Asp Ser Tyr Phe Ser Val Leu Asn Ala
 115 120 125
 Phe Ile Asp Arg Lys Asp Ser Tyr Tyr Ser Ile His Gln Ile Ala Gln
 130 135 140
 Met Gly Val Gly Glu Gly Lys Ser Ile Gly Gln Trp Tyr Pro Asn

| | | | |
|---|-----|-----|-----|
| 145 | 150 | 155 | 160 |
| Thr Val Ala Gln Val Leu Lys Lys Leu Ala Val Phe Asp Thr Trp Ser | | | |
| 165 | 170 | 175 | |
| Ser Leu Ala Val His Ile Ala Met Asp Asn Thr Val Val Met Glu Glu | | | |
| 180 | 185 | 190 | |
| Ile Arg Arg Leu Cys Arg Thr Ser Val Pro Cys Ala Gly Ala Thr Ala | | | |
| 195 | 200 | 205 | |
| Phe Pro Ala Asp Ser Asp Arg His Cys Asn Gly Phe Pro Ala Gly Ala | | | |
| 210 | 215 | 220 | |
| Glu Val Thr Asn Arg Pro Ser Pro Trp Arg Pro Leu Val Leu Leu Ile | | | |
| 225 | 230 | 235 | 240 |
| Pro Leu Arg Leu Gly Leu Thr Asp Ile Asn Glu Ala Tyr Val Glu Thr | | | |
| 245 | 250 | 255 | |
| Leu Lys His Cys Phe Met Met Pro Gln Ser Leu Gly Val Ile Gly Gly | | | |
| 260 | 265 | 270 | |
| Lys Pro Asn Ser Ala His Tyr Phe Ile Gly Xaa Val Gly Glu Glu Leu | | | |
| 275 | 280 | 285 | |
| Ile Tyr Leu Asp Pro His Thr Thr Gln Pro Ala Val Glu Pro Thr Asp | | | |
| 290 | 295 | 300 | |
| Gly Cys Phe Ile Pro Asp Glu Ser Phe His Cys Gln His Pro Pro Cys | | | |
| 305 | 310 | 315 | 320 |
| Arg Met Ser Ile Ala Glu Leu Asp Pro Ser Ile Ala Val Val Arg Gly | | | |
| 325 | 330 | 335 | |
| Gly His Leu Ser Thr Gln Ala Phe Gly Ala Glu Cys Cys Leu Gly Met | | | |
| 340 | 345 | 350 | |
| Thr Arg Lys Thr Phe Gly Phe Leu Arg Phe Phe Phe Ser Met Leu Gly | | | |
| 355 | 360 | 365 | 368 |

<210> 1071
 <211> 81
 <212>Amino acid
 <213> Homo sapiens

| |
|---|
| <400> 1071 |
| Ala Leu Cys Val Val Pro Phe Asn Thr Phe His Asn Asp Phe Leu Leu |
| 1 5 10 15 |
| Leu Asp Lys Glu Gly Thr Leu Asp Pro Val Met Asp Ser Phe Ser Thr |
| 20 25 30 |
| His Trp Thr Thr Ile Gly Pro Ala Asp Met Phe Phe Ser Phe Arg Gln |
| 35 40 45 |
| His Tyr Lys Asn Phe Lys Ser His Gly Thr Asn Pro Ser Lys Ser Val |
| 50 55 60 |
| Trp Ala His Ala Thr Cys Gln Ser Cys Ala Phe Pro Asn Leu Leu Gly |
| 65 70 75 80 |
| Trp |
| 81 |

<210> 1072
 <211> 494
 <212>Amino acid
 <213> Homo sapiens

<400> 1072
 Thr Arg Leu Ala Glu Phe Gly Thr Arg Asp Pro Cys Ala Gln Ala Pro
 1 5 10 15
 Cys Glu Gln Gln Cys Glu Pro Gly Gly Pro Gln Gly Tyr Ser Cys His
 20 25 30
 Cys Arg Leu Gly Phe Arg Pro Ala Glu Asp Asp Pro His Arg Cys Val
 35 40 45
 Asp Thr Asp Glu Cys Gln Ile Ala Gly Val Cys Gln Gln Met Cys Val
 50 55 60
 Asn Tyr Val Gly Gly Phe Glu Cys Tyr Cys Ser Glu Gly His Glu Leu
 65 70 75 80
 Glu Ala Asp Gly Ile Ser Cys Ser Pro Ala Gly Ala Met Gly Ala Gln
 85 90 95
 Ala Ser Gln Asp Leu Gly Asp Glu Leu Leu Asp Asp Gly Glu Asp Glu
 100 105 110
 Glu Asp Glu Asp Glu Ala Trp Lys Ala Phe Asn Gly Gly Trp Thr Glu
 115 120 125
 Met Pro Gly Ile Leu Trp Met Glu Pro Thr Gln Pro Pro Asp Phe Ala
 130 135 140
 Leu Ala Tyr Arg Pro Ser Phe Pro Glu Asp Arg Glu Pro Gln Ile Pro
 145 150 155 160
 Tyr Pro Glu Pro Thr Trp Pro Pro Pro Ile Ser Ala Pro Arg Val Pro
 165 170 175
 Tyr His Ser Ser Val Leu Ser Val Thr Arg Pro Val Val Val Ser Ala
 180 185 190
 Thr His Pro Thr Ile Pro Ser Ala His Gln Pro Pro Val Ile Pro Ala
 195 200 205
 Thr His Pro Ala Leu Ser Arg Asp His Gln Ile Pro Val Ile Ala Ala
 210 215 220
 Asn Tyr Pro Asp Leu Pro Ser Ala Tyr Gln Pro Gly Ile Leu Ser Val
 225 230 235 240
 Ser His Ser Ala Gln Pro Pro Ala His Gln Pro Pro Met Ile Ser Thr
 245 250 255
 Lys Tyr Pro Glu Leu Phe Pro Ala His Gln Ser Pro Met Phe Pro Asp
 260 265 270
 Thr Arg Val Ala Gly Thr Gln Thr Thr His Leu Pro Gly Ile Pro
 275 280 285
 Pro Asn His Ala Pro Leu Val Thr Thr Leu Gly Ala Gln Leu Pro Pro
 290 295 300
 Gln Ala Pro Asp Ala Leu Val Leu Arg Thr Gln Ala Thr Gln Leu Pro
 305 310 315 320
 Ile Ile Pro Thr Ala Gln Pro Ser Leu Thr Thr Thr Ser Arg Ser Pro
 325 330 335
 Val Ser Pro Ala His Gln Ile Ser Val Pro Ala Ala Thr Gln Pro Ala
 340 345 350
 Ala Leu Pro Thr Leu Leu Pro Ser Gln Ser Pro Thr Asn Gln Thr Ser
 355 360 365
 Pro Ile Ser Pro Thr His Pro His Ser Lys Ala Pro Gln Ile Pro Arg
 370 375 380
 Glu Asp Gly Pro Ser Pro Lys Leu Ala Leu Trp Leu Pro Ser Pro Ala
 385 390 395 400
 Pro Thr Ala Ala Pro Thr Ala Leu Gly Glu Ala Gly Leu Ala Glu His
 405 410 415
 Ser Gln Arg Asp Asp Arg Trp Leu Leu Val Ala Leu Leu Val Pro Thr
 420 425 430
 Cys Val Phe Leu Val Val Leu Leu Ala Leu Gly Ile Val Tyr Cys Thr
 435 440 445
 Arg Cys Gly Pro His Ala Pro Asn Lys Arg Ile Thr Asp Cys Tyr Arg
 450 455 460
 Trp Val Ile His Ala Gly Ser Lys Ser Pro Thr Glu Pro Met Pro Pro
 465 470 475 480
 Arg Gly Ser Leu Thr Gly Val Gln Thr Cys Arg Thr Ser Val
 485 490 494

<210> 1073
<211> 468
<212>Amino acid
<213> Homo sapiens

<400> 1073
Leu Arg Val Arg Arg Pro His Leu Pro Ala Pro Pro Ala Leu Arg
1 5 10 15
Ala Arg Arg Ser Asp Arg Arg Ser Ser Arg Ala Pro Ala Ala Phe Pro
20 25 30
Pro Arg Pro Pro His Ala Ser Pro Ala Pro Gly Pro Ala Met Ala Gln
35 40 45
Ala Val Trp Ser Arg Leu Gly Arg Ile Leu Trp Leu Ala Cys Leu Leu
50 55 60
Pro Trp Ala Pro Ala Gly Val Ala Ala Gly Leu Tyr Glu Leu Asn Leu
65 70 75 80
Thr Thr Asp Ser Pro Ala Thr Thr Gly Ala Val Val Thr Ile Ser Ala
85 90 95
Ser Leu Val Ala Lys Asp Asn Gly Ser Leu Ala Leu Pro Ala Asp Ala
100 105 110
His Leu Tyr Arg Phe His Trp Ile His Thr Pro Leu Val Leu Thr Gly
115 120 125
Lys Met Glu Lys Gly Leu Ser Ser Thr Ile Arg Val Val Gly His Val
130 135 140
Pro Gly Glu Phe Pro Val Ser Val Trp Val Thr Ala Ala Asp Cys Trp
145 150 155 160
Met Cys Gln Pro Val Ala Arg Gly Phe Val Val Leu Pro Ile Thr Glu
165 170 175
Phe Leu Val Gly Asp Leu Val Val Thr Gln Asn Thr Ser Leu Pro Trp
180 185 190
Pro Ser Ser Tyr Leu Thr Lys Thr Val Leu Lys Val Ser Phe Leu Leu
195 200 205
His Asp Pro Ser Asn Phe Leu Lys Thr Ala Leu Phe Leu Tyr Ser Trp
210 215 220
Asp Phe Gly Asp Gly Thr Gln Met Val Thr Glu Asp Ser Val Val Tyr
225 230 235 240
Tyr Asn Tyr Ser Ile Ile Gly Thr Phe Thr Val Lys Leu Lys Val Val
245 250 255
Ala Glu Trp Glu Glu Val Glu Pro Asp Ala Thr Arg Ala Val Lys Gln
260 265 270
Lys Thr Gly Asp Phe Ser Ala Ser Leu Lys Leu Gln Glu Thr Leu Arg
275 280 285
Gly Ile Gln Val Leu Gly Pro Thr Leu Ile Gln Thr Phe Gln Lys Met
290 295 300
Thr Val Thr Leu Asn Phe Leu Gly Ser Pro Pro Leu Thr Val Cys Trp
305 310 315 320
Arg Leu Lys Pro Glu Cys Leu Pro Leu Glu Glu Gly Glu Cys His Pro
325 330 335
Val Ser Val Ala Ser Thr Ala Tyr Asn Leu Thr His Thr Phe Arg Asp
340 345 350
Pro Gly Asp Tyr Cys Phe Ser Ile Arg Ala Glu Asn Ile Ile Ser Lys
355 360 365
Thr His Gln Tyr His Lys Ile Gln Val Trp Pro Ser Arg Ile Gln Pro
370 375 380
Ala Val Phe Ala Phe Pro Cys Ala Thr Leu Ile Thr Val Met Leu Ala
385 390 395 400
Phe Ile Met Tyr Met Thr Leu Arg Asn Ala Thr Gln Gln Lys Asp Met
405 410 415
Val Glu Asn Pro Glu Pro Pro Ser Gly Val Arg Cys Cys Gln Met

| | | | | | | | | | | | | | | | |
|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Cys | Cys | Gly | Pro | Phe | Leu | Leu | Glu | Thr | Pro | Ser | Glu | Tyr | Leu | Glu | Ile |
| | | 420 | | | | | 425 | | | | 430 | | | | |
| | | 435 | | | | | 440 | | | | 445 | | | | |
| Val | Arg | Glu | Aasn | His | Gly | Leu | Leu | Pro | Pro | Leu | Tyr | Lys | Ser | Val | Lys |
| | | 450 | | | | 455 | | | | 460 | | | | | |
| Thr | Tyr | Thr | Val | | | | | | | | | | | | |
| 465 | | | 468 | | | | | | | | | | | | |

<210> 1074
<211> 288
<212>Amino acid
<213> Homo sapiens

| | | | | | | | | | | | | | | | |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <400> 1074 | | | | | | | | | | | | | | | |
| Val | Val | Glu | Phe | Ala | Phe | Gln | Leu | Ser | Ser | Val | Cys | Leu | Thr | | |
| 1 | | 5 | | | | | 10 | | | | 15 | | | | |
| Val | Ser | Phe | Gly | Trp | Gln | Leu | Gly | Thr | Val | Ser | Ser | Cys | Leu | Ser | Arg |
| | | | | 20 | | | | 25 | | | | 30 | | | |
| Asp | Trp | Phe | Leu | Lys | Gly | Asn | Leu | Leu | Ile | Ile | Ile | Val | Ser | Val | Leu |
| | | | | 35 | | | 40 | | | | | 45 | | | |
| Ile | Ile | Leu | Pro | Leu | Ala | Leu | Met | Lys | His | Leu | Gly | Tyr | Leu | Gly | Tyr |
| | | | | | | | 50 | 55 | | | 60 | | | | |
| Thr | Ser | Gly | Leu | Ser | Leu | Thr | Cys | Met | Leu | Phe | Leu | Val | Ser | Val | |
| | | | | 65 | | | 70 | | | 75 | | | 80 | | |
| Ile | Tyr | Lys | Lys | Phe | Gln | Leu | Gly | Cys | Ala | Ile | Gly | His | Asn | Glu | Thr |
| | | | | | 85 | | | | 90 | | | 95 | | | |
| Ala | Met | Glu | Ser | Glu | Ala | Leu | Val | Gly | Leu | Pro | Ser | Gln | Gly | Leu | Asn |
| | | | | | 100 | | | 105 | | | | 110 | | | |
| Ser | Ser | Cys | Glu | Ala | Gln | Met | Phe | Thr | Val | Asp | Ser | Gln | Met | Ser | Tyr |
| | | | | | 115 | | | 120 | | | | 125 | | | |
| Thr | Val | Pro | Ile | Met | Ala | Phe | Ala | Phe | Val | Cys | His | Pro | Glu | Val | Leu |
| | | | | | 130 | | | 135 | | | 140 | | | | |
| Pro | Ile | Tyr | Thr | Glu | Cys | Arg | Pro | Ser | Lys | Arg | Arg | Met | Gln | Ala | |
| | | | | | 145 | | | 150 | | | 155 | | | 160 | |
| Val | Ala | Asn | Val | Ser | Ile | Gly | Ala | Met | Phe | Cys | Met | Tyr | Gly | Leu | Thr |
| | | | | | 165 | | | | 170 | | | 175 | | | |
| Ala | Thr | Phe | Gly | Tyr | Leu | Thr | Phe | Tyr | Ser | Ser | Val | Lys | Ala | Glu | Met |
| | | | | | 180 | | | 185 | | | | 190 | | | |
| Leu | His | Met | Tyr | Ser | Gln | Lys | Asp | Pro | Leu | Ile | Leu | Cys | Val | Arg | Leu |
| | | | | | 195 | | | 200 | | | 205 | | | | |
| Ala | Ala | Leu | Leu | Ala | Val | Thr | Leu | Thr | Val | Pro | Val | Val | Leu | Phe | Pro |
| | | | | | 210 | | | 215 | | | 220 | | | | |
| Ile | Arg | Arg | Ala | Leu | Gln | Gln | Leu | Leu | Phe | Pro | Gly | Lys | Ala | Phe | Ser |
| | | | | | 225 | | | 230 | | | 235 | | | 240 | |
| Trp | Pro | Arg | His | Val | Ala | Ile | Ala | Leu | Ile | Leu | Leu | Val | Asn | | |
| | | | | | 245 | | | | 250 | | | 255 | | | |
| Val | Leu | Val | Ile | Cys | Val | Pro | Thr | Ile | Arg | Asp | Ile | Phe | Gly | Val | Ile |
| | | | | | 260 | | | | 265 | | | 270 | | | |
| Gly | Ser | Thr | Ser | Ala | Pro | Ser | Leu | Ile | Phe | Ile | Leu | Pro | Ser | Cys | Ile |
| | | | | | 275 | | | 280 | | | 285 | | | 288 | |

<210> 1075
<211> 273
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(273)
<223> X = any amino acid or stop code

<400> 1075
Gly Ala Gly Ser Lys Ser Ser Met Met Gln Leu Met His Leu Glu Ser
1 5 10 15
Phe Tyr Glu Lys Pro Pro Pro Gly Leu Ile Lys Glu Asp Asp Thr Lys
20 25 30
Pro Glu Asp Cys Ile Pro Asp Val Pro Gly Asn Glu His Ala Arg Glu
35 40 45
Phe Leu Ala His Thr Pro Thr Lys Gly Leu Trp Met Pro Leu Glu Lys
50 55 60
Glu Val Lys Val Lys His Cys Thr Phe His Trp Ile Ala Ser Xaa Phe
65 70 75 80
Leu Gly Asp Gly Lys Phe Ile Pro Lys Ala Thr Arg Leu Lys Asp Val
85 90 95
Trp Val Ser Asn Xaa Phe Thr Cys Leu Phe Trp Asp Leu Thr Arg Phe
100 105 110
Ile His Asp Cys Ile Phe Phe Xaa Asn Trp Ser Leu Met Asn Lys Asn
115 120 125
Phe Asn Ile Ile Tyr Xaa Phe Phe Ile Ser Leu Arg Xaa Asn Thr Leu
130 135 140
Ile Leu Gln Lys Tyr Phe Pro Phe Ser Leu Leu Gly Trp His Cys
145 150 155 160
Lys Trp Tyr Gly His Arg Thr Gly Tyr Lys Glu Cys Pro Phe Phe Ile
165 170 175
Lys Asp Asn Gln Lys Leu Gln Gln Phe Arg Val Ala His Glu Asp Phe
180 185 190
Met Tyr Asp Ile Ile Arg Asp Asn Lys Gln His Glu Lys Asn Val Arg
195 200 205
Ile Gln Gln Leu Lys Gln Leu Glu Asp Ser Thr Ser Gly Glu Asp
210 215 220
Arg Ser Ser Ser Ser Ser Glu Gly Lys Glu Lys His Lys Lys Lys
225 230 235 240
Lys Lys Lys Glu Lys His Lys Lys Arg Lys Lys Glu Lys Lys Lys Lys
245 250 255
Lys Lys Arg Lys His Lys Ser Ser Lys Ser Asn Glu Gly Ser Asp Ser
260 265 270
Glu
273

<210> 1076
<211> 815
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(815)
<223> X = any amino acid or stop code

<400> 1076
Glu Ile Ala Gly Ala Ala Ala Glu Asn Met Leu Gly Ser Leu Leu Cys

| | | | |
|---|---------------------------------|-----|-----|
| 1 | 5 | 10 | 15 |
| Leu Pro Gly Ser Gly Ser Val Leu | Leu Asp Pro Cys Thr Gly Ser Thr | | |
| 20 | 25 | 30 | |
| Ile Ser Glu Thr Thr Ser Glu Ala | Trp Ser Val Glu Val Leu Pro Ser | | |
| 35 | 40 | 45 | |
| Asp Ser Glu Ala Pro Asp Leu Lys | Gln Glu Glu Arg Leu Gln Glu Leu | | |
| 50 | 55 | 60 | |
| Glu Ser Cys Ser Gly Leu Gly Ser Thr Ser Asp Asp Thr Asp Val Arg | | | |
| 65 | 70 | 75 | 80 |
| Glu Val Ser Ser Arg Pro Ser Thr Pro Gly Leu Ser Val Val Ser Gly | | | |
| 85 | 90 | 95 | |
| Ile Ser Ala Thr Ser Glu Asp Ile Pro Asn Lys Ile Glu Asp Leu Arg | | | |
| 100 | 105 | 110 | |
| Ser Glu Cys Ser Ser Asp Phe Gly Gly Lys Asp Ser Val Thr Ser Pro | | | |
| 115 | 120 | 125 | |
| Asp Met Asp Glu Ile Thr His Asp Phe Leu Tyr Ile Leu Gln Pro Lys | | | |
| 130 | 135 | 140 | |
| Gln His Phe Gln His Ile Glu Ala Glu Ala Asp Met Arg Ile Gln Leu | | | |
| 145 | 150 | 155 | 160 |
| Ser Ser Ser Ala His Gln Leu Thr Ser Pro Pro Ser Gln Ser Glu Ser | | | |
| 165 | 170 | 175 | |
| Leu Leu Ala Met Phe Asp Pro Leu Ser Ser His Glu Gly Ala Ser Ala | | | |
| 180 | 185 | 190 | |
| Val Val Arg Pro Lys Val His Tyr Ala Arg Pro Ser His Pro Pro Pro | | | |
| 195 | 200 | 205 | |
| Asp Pro Pro Ile Leu Glu Gly Ala Val Gly Gly Asn Glu Ala Arg Leu | | | |
| 210 | 215 | 220 | |
| Pro Asn Phe Gly Ser Pro Met Phe Xaa Leu Pro Ala Glu Met Glu Ala | | | |
| 225 | 230 | 235 | 240 |
| Phe Lys Gln Arg His Ser Tyr Thr Pro Glu Arg Leu Val Arg Ser Arg | | | |
| 245 | 250 | 255 | |
| Ser Ser Asp Ile Val Ser Ser Val Arg Arg Pro Met Ser Asp Pro Ser | | | |
| 260 | 265 | 270 | |
| Trp Asn Arg Arg Pro Gly Asn Glu Glu Arg Leu Pro Pro Ala Ala | | | |
| 275 | 280 | 285 | |
| Ala Ile Gly Ala Thr Ser Leu Val Ala Ala Pro His Ser Ser Ser Ser | | | |
| 290 | 295 | 300 | |
| Ser Pro Ser Lys Asp Ser Ser Arg Gly Glu Thr Glu Glu Arg Lys Asp | | | |
| 305 | 310 | 315 | 320 |
| Ser Asp Asp Glu Lys Ser Asp Arg Asn Arg Pro Trp Trp Arg Lys Arg | | | |
| 325 | 330 | 335 | |
| Phe Val Ser Ala Met Pro Lys Ala Pro Ile Pro Phe Arg Lys Lys Glu | | | |
| 340 | 345 | 350 | |
| Lys Gln Glu Lys Asp Lys Asp Asp Leu Gly Pro Asp Arg Phe Ser Thr | | | |
| 355 | 360 | 365 | |
| Leu Thr Asp Asp Pro Ser Pro Arg Leu Ser Ala Gln Ala Gln Val Ala | | | |
| 370 | 375 | 380 | |
| Glu Asp Ile Leu Asp Lys Tyr Arg Asn Ala Ile Lys Arg Thr Ser Pro | | | |
| 385 | 390 | 395 | 400 |
| Ser Asp Gly Ala Met Ala Asn Tyr Glu Ser Thr Glu Val Met Gly Asp | | | |
| 405 | 410 | 415 | |
| Gly Glu Ser Ala His Asp Ser Pro Arg Asp Glu Ala Leu Gln Asn Ile | | | |
| 420 | 425 | 430 | |
| Ser Ala Asp Asp Leu Pro Asp Ser Ala Ser Gln Ala Ala His Pro Gln | | | |
| 435 | 440 | 445 | |
| Asp Ser Ala Phe Ser Tyr Arg Asp Ala Lys Lys Leu Arg Leu Ala | | | |
| 450 | 455 | 460 | |
| Leu Cys Ser Ala Asp Ser Val Ala Phe Pro Val Leu Thr His Ser Thr | | | |
| 465 | 470 | 475 | 480 |
| Arg Asn Gly Leu Pro Asp His Thr Asp Pro Glu Asp Asn Glu Ile Val | | | |
| 485 | 490 | 495 | |
| Cys Phe Leu Lys Val Gln Ile Ala Glu Ala Ile Asn Leu Gln Asp Lys | | | |
| 500 | 505 | 510 | |
| Asn Leu Met Ala Gln Leu Gln Glu Thr Met Arg Cys Val Cys Arg Phe | | | |

| | | |
|---|-----|-----|
| 515 | 520 | 525 |
| Asp Asn Arg Thr Cys Arg Lys Leu Leu Ala Ser Ile Ala Glu Asp Tyr | | |
| 530 | 535 | 540 |
| Arg Lys Arg Ala Pro Tyr Ile Ala Tyr Leu Thr Arg Cys Arg Gln Gly | | |
| 545 | 550 | 555 |
| Leu Gln Thr Thr Gln Ala His Leu Glu Arg Leu Leu Gln Arg Val Leu | | |
| 565 | 570 | 575 |
| Arg Asp Lys Glu Val Ala Asn Arg Tyr Phe Thr Thr Val Cys Val Arg | | |
| 580 | 585 | 590 |
| Leu Leu Leu Glu Ser Lys Glu Lys Ile Arg Glu Phe Ile Gln Asp | | |
| 595 | 600 | 605 |
| Phe Gln Lys Leu Thr Ala Ala Asp Asp Lys Thr Ala Gln Val Glu Asp | | |
| 610 | 615 | 620 |
| Phe Leu Gln Phe Leu Tyr Gly Ala Met Ala Gln Asp Val Ile Trp Gln | | |
| 625 | 630 | 635 |
| Asn Ala Ser Glu Glu Gln Leu Gln Asp Ala Gln Leu Ala Ile Glu Arg | | |
| 645 | 650 | 655 |
| Ser Val Met Asn Arg Ile Phe Lys Leu Ala Phe Tyr Pro Asn Gln Asp | | |
| 660 | 665 | 670 |
| Gly Asp Ile Leu Arg Asp Gln Val Leu His Glu His Ile Gln Arg Leu | | |
| 675 | 680 | 685 |
| Ser Lys Val Val Thr Ala Asn His Arg Ala Leu Ile Pro Glu Val | | |
| 690 | 695 | 700 |
| Tyr Leu Arg Glu Ala Pro Trp Pro Ser Ala Gln Ser Glu Ile Arg Thr | | |
| 705 | 710 | 715 |
| Ile Ser Ala Tyr Lys Thr Pro Arg Asp Lys Val Gln Cys Ile Leu Arg | | |
| 725 | 730 | 735 |
| Met Cys Ser Thr Ile Met Asn Leu Leu Ser Leu Ala Asn Glu Asp Ser | | |
| 740 | 745 | 750 |
| Val Pro Gly Ala Asp Asp Phe Val Pro Val Leu Val Phe Val Leu Ile | | |
| 755 | 760 | 765 |
| Lys Ala Asn Pro Pro Cys Leu Leu Ser Thr Val Gln Tyr Ile Ser Ser | | |
| 770 | 775 | 780 |
| Phe Tyr Ala Ser Cys Leu Ser Gly Glu Glu Ser Tyr Trp Trp Met Gln | | |
| 785 | 790 | 795 |
| Phe Thr Ala Ala Val Glu Phe Ile Lys Thr Ile Asp Asp Arg Lys | | |
| 805 | 810 | 815 |

<210> 1077

<211> 256

<212>Amino acid

<213> Homo sapiens

<400> 1077

| | | |
|---|-----|-----|
| Trp Pro Met Ser Leu Ala Arg Gly His Gly Asp Thr Ala Ala Ser Thr | | |
| 1 | 5 | 10 |
| Ala Ala Pro Leu Ser Glu Glu Gly Val Thr Ser Gly Leu Gln Ala | | |
| 20 | 25 | 30 |
| Leu Ala Val Glu Asp Thr Gly Gly Pro Ser Ala Ser Ala Gly Lys Ala | | |
| 35 | 40 | 45 |
| Glu Asp Glu Gly Glu Gly Gly Arg Glu Glu Thr Glu Arg Glu Gly Ser | | |
| 50 | 55 | 60 |
| Gly Gly Glu Ala Gln Gly Glu Val Pro Ser Ala Gly Gly Glu Glu | | |
| 65 | 70 | 75 |
| Pro Ala Glu Glu Asp Ser Glu Asp Trp Cys Val Pro Cys Ser Asp Glu | | |
| 85 | 90 | 95 |
| Glu Val Glu Leu Pro Ala Asp Gly Gln Pro Trp Met Pro Pro Ser | | |
| 100 | 105 | 110 |
| Glu Ile Gln Arg Leu Tyr Glu Leu Leu Ala Ala His Gly Thr Leu Glu | | |

| | | |
|---|-----|---------|
| 115 | 120 | 125 |
| Leu Gln Ala Glu Ile Leu Pro Arg Arg Pro Pro Thr Pro Glu Ala Gln | | |
| 130 | 135 | 140 |
| Ser Glu Glu Glu Arg Ser Asp Glu Glu Pro Glu Ala Lys Glu Glu Glu | | |
| 145 | 150 | 155 |
| Glu Glu Lys Pro His Met Pro Thr Glu Phe Asp Phe Asp Asp Glu Pro | | |
| 165 | 170 | 175 |
| Val Thr Pro Lys Asp Ser Leu Ile Asp Arg Arg Arg Thr Pro Gly Ser | | |
| 180 | 185 | 190 |
| Ser Ala Arg Ser Gln Lys Arg Glu Ala Arg Leu Asp Lys Val Leu Ser | | |
| 195 | 200 | 205 |
| Asp Met Lys Arg His Lys Lys Leu Glu Glu Gln Ile Leu Arg Thr Gly | | |
| 210 | 215 | 220 |
| Arg Asp Leu Phe Ser Leu Asp Ser Glu Asp Pro Ser Pro Ala Ser Pro | | |
| 225 | 230 | 235 |
| Pro Leu Arg Ser Ser Gly Ser Ser Leu Phe Pro Arg Gln Arg Lys Tyr | | |
| 245 | 250 | 255 256 |

<210> 1078
 <211> 590
 <212> Amino acid
 <213> Homo sapiens

 <220>
 <221> misc_feature
 <222> (1)...(590)
 <223> X = any amino acid or stop code

| |
|---|
| <400> 1078 |
| Leu Gly Arg Gly Thr Phe Gly Gln Val Val Xaa Cys Trp Lys Arg Gly |
| 1 5 10 15 |
| Thr Asn Glu Ile Val Ala Ile Lys Ile Leu Lys Asn His Pro Ser Tyr |
| 20 25 30 |
| Ala Arg Gln Gly Gln Ile Glu Val Ser Ile Leu Ala Arg Leu Ser Thr |
| 35 40 45 |
| Glu Ser Ala Asp Asp Tyr Asn Phe Val Arg Ala Tyr Glu Cys Phe Gln |
| 50 55 60 |
| His Lys Asn His Thr Cys Leu Val Phe Glu Met Leu Glu Gln Asn Leu |
| 65 70 75 80 |
| Tyr Asp Phe Leu Lys Gln Asn Lys Phe Ser Pro Leu Pro Leu Lys Tyr |
| 85 90 95 |
| Ile Arg Pro Val Leu Gln Gln Val Ala Thr Ala Leu Met Lys Leu Lys |
| 100 105 110 |
| Ser Leu Gly Leu Ile His Ala Asp Leu Lys Pro Glu Asn Ile Met Leu |
| 115 120 125 |
| Val Asp Pro Ser Arg Gln Pro Tyr Arg Val Lys Val Ile Asp Phe Gly |
| 130 135 140 |
| Ser Ala Ser His Val Ser Lys Ala Val Cys Ser Thr Tyr Leu Gln Ser |
| 145 150 155 160 |
| Arg Tyr Tyr Arg Ala Pro Glu Ile Ile Leu Gly Leu Pro Phe Cys Glu |
| 165 170 175 |
| Ala Ile Asp Met Trp Ser Leu Gly Cys Val Ile Ala Glu Leu Phe Leu |
| 180 185 190 |
| Gly Trp Pro Leu Tyr Pro Gly Ala Ser Glu Tyr Asp Gln Ile Arg Tyr |
| 195 200 205 |
| Ile Ser Gln Thr Gln Gly Leu Pro Ala Glu Tyr Leu Leu Ser Ala Gly |
| 210 215 220 |

| | | | |
|--|-----|-----|-----|
| Thr Lys Thr Thr Arg Phe Phe Asn Arg Asp Thr Asp Ser Pro Tyr Pro | | | |
| 225 | 230 | 235 | 240 |
| Leu Trp Arg Leu Lys Thr Pro Asp Asp His Glu Ala Glu Thr Gly Ile | | | |
| 245 | 250 | 255 | |
| Lys Ser Lys Glu Ala Arg Lys Tyr Ile Phe Asn Cys Leu Asp Asp Met | | | |
| 260 | 265 | 270 | |
| Ala Gln Val Asn Met Thr Thr Asp Leu Glu Gly Ser Asp Met Leu Val | | | |
| 275 | 280 | 285 | |
| Glu Lys Ala Val Arg Arg Glu Phe Ile Asp Leu Leu Lys Lys Met Leu | | | |
| 290 | 295 | 300 | |
| Ser Ile Asp Ser Val Lys Arg Phe Ser Pro Val, Gly Ser Leu Asn His | | | |
| 305 | 310 | 315 | 320 |
| Pro Phe Val Thr Met Ser Leu Phe Leu Asp Phe Pro His Ser Thr His | | | |
| 325 | 330 | 335 | |
| Val Lys Ser Cys Phe Gln Asn Met Glu Ile Cys Lys Arg Arg Val Asn | | | |
| 340 | 345 | 350 | |
| Met Tyr Asp Thr Val Asn Gln Ser Lys Thr Pro Phe Ile Thr His Val | | | |
| 355 | 360 | 365 | |
| Ala Pro Ser Thr Ser Thr Asn Leu Thr Met Thr Phe Asn Asn Gln Leu | | | |
| 370 | 375 | 380 | |
| Thr Thr Val His Asn Gln Pro Ser Ala Ala Ser Met Ala Ala Val Ala | | | |
| 385 | 390 | 395 | 400 |
| Gln Arg Ser Met Pro Leu Gln Thr Gly Thr Ala Gln Ile Cys Ala Arg | | | |
| 405 | 410 | 415 | |
| Pro Asp Pro Phe Gln Gln Ala Leu Ile Val Cys Pro Pro Gly Phe Gln | | | |
| 420 | 425 | 430 | |
| Gly Leu Gln Ala Ser Pro Ser Lys His Ala Gly Tyr Ser Val Arg Met | | | |
| 435 | 440 | 445 | |
| Glu Asn Ala Val Pro Ile Val Thr Gln Ala Pro Gly Ala Gln Pro Leu | | | |
| 450 | 455 | 460 | |
| Gln Ile Gln Pro Gly Leu Leu Ala Gln Gln Ala Trp Pro Ser Gly Thr | | | |
| 465 | 470 | 475 | 480 |
| Gln Gln Ile Leu Pro Pro Ala Trp Gln Gln Leu Thr Gly Val Ala | | | |
| 485 | 490 | 495 | |
| Thr His Thr Ser Val Gln His Ala Ala Val Ile Pro Glu Thr Met Ala | | | |
| 500 | 505 | 510 | |
| Gly Thr Gln Gln Leu Ala Asp Trp Arg Asn Thr His Ala His Gly Ser | | | |
| 515 | 520 | 525 | |
| His Tyr Asn Pro Ile Met Gln Gln Pro Ala Leu Leu Thr Gly His Val | | | |
| 530 | 535 | 540 | |
| Thr Leu Pro Ala Ala Gln Pro Leu Asn Val Gly Val Ala His Val Met | | | |
| 545 | 550 | 555 | 560 |
| Arg Gln Gln Pro Thr Ser Thr Ser Ser Arg Lys Ser Lys Gln His | | | |
| 565 | 570 | 575 | |
| Leu Tyr Cys Gly Arg Ala Arg Val Ser Lys Ile Ala Ser Arg | | | |
| 580 | 585 | 590 | |

<210> 1079

<211> 904

<212> Amino acid

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(904)

<223> X = any amino acid or stop code

<400> 1079

Glu Phe Ala Ile Cys Arg Tyr Pro Leu Gly Met Ser Gly Gly Gln Ile

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1 | 5 | 10 | 15 | | | | | | | | | | | | |
| Pro | Asp | Glu | Asp | Ile | Thr | Ala | Ser | Ser | Gln | Trp | Ser | Glu | Ser | Thr | Ala |
| | | | | 20 | | 25 | | | | | | | 30 | | |
| Ala | Lys | Tyr | Gly | Arg | Leu | Asp | Ser | Glu | Glu | Gly | Asp | Gly | Ala | Trp | Cys |
| | 35 | | | | 40 | | | | | | | 45 | | | |
| Pro | Glu | Ile | Pro | Val | Glu | Pro | Asp | Asp | Leu | Lys | Glu | Phe | Leu | Gln | Ile |
| | 50 | | | 55 | | | | | 60 | | | | | | |
| Asp | Leu | His | Thr | Leu | His | Phe | Ile | Thr | Leu | Val | Gly | Thr | Gln | Gly | Arg |
| | 65 | | | 70 | | | | | 75 | | | | | | 80 |
| His | Ala | Gly | Gly | His | Gly | Ile | Glu | Phe | Ala | Pro | Met | Tyr | Lys | Ile | Asn |
| | 85 | | | | | | | 90 | | | | | 95 | | |
| Tyr | Ser | Arg | Asp | Gly | Thr | Arg | Trp | Ile | Ser | Trp | Arg | Asn | Arg | His | Gly |
| | 100 | | | | | | | 105 | | | | 110 | | | |
| Lys | Gln | Val | Leu | Asp | Gly | Asn | Ser | Asn | Pro | Tyr | Asp | Ile | Phe | Leu | Lys |
| | 115 | | | | | | | 120 | | | | 125 | | | |
| Asp | Leu | Glu | Pro | Pro | Ile | Val | Ala | Arg | Phe | Val | Arg | Phe | Ile | Pro | Val |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| Thr | Asp | His | Ser | Met | Asn | Val | Cys | Met | Arg | Val | Glu | Leu | Tyr | Gly | Cys |
| | 145 | | | | | 150 | | | | 155 | | | | | 160 |
| Val | Trp | Leu | Asp | Gly | Leu | Val | Ser | Tyr | Asn | Ala | Pro | Ala | Gly | Gln | Gln |
| | 165 | | | | | | | 170 | | | | 175 | | | |
| Phe | Val | Leu | Pro | Gly | Gly | Ser | Ile | Ile | Tyr | Leu | Asn | Asp | Ser | Val | Tyr |
| | 180 | | | | | | | 185 | | | | 190 | | | |
| Asp | Gly | Ala | Val | Gly | Tyr | Ser | Met | Thr | Glu | Gly | Leu | Gly | Gln | Leu | Thr |
| | 195 | | | | | | | 200 | | | | 205 | | | |
| Asp | Gly | Val | Ser | Gly | Leu | Asp | Phe | Thr | Gln | Thr | His | Glu | Tyr | His | |
| | 210 | | | | | | | 215 | | | | 220 | | | |
| Val | Trp | Pro | Gly | Tyr | Asp | Tyr | Val | Gly | Trp | Arg | Asn | Glu | Ser | Ala | Thr |
| | 225 | | | | | | 230 | | | | 235 | | | | 240 |
| Asn | Gly | Tyr | Ile | Glu | Ile | Met | Phe | Glu | Phe | Asp | Arg | Ile | Arg | Asn | Phe |
| | 245 | | | | | | | 250 | | | | 255 | | | |
| Thr | Thr | Met | Lys | Val | His | Cys | Asn | Asn | Met | Phe | Ala | Lys | Gly | Val | Lys |
| | 260 | | | | | | | 265 | | | | 270 | | | |
| Ile | Phe | Lys | Glu | Val | Gln | Cys | Tyr | Phe | Arg | Ser | Glu | Ala | Ser | Glu | Trp |
| | 275 | | | | | | | 280 | | | | 285 | | | |
| Glu | Pro | Asn | Ala | Ile | Ser | Phe | Pro | Leu | Val | Leu | Asp | Asp | Val | Asn | Pro |
| | 290 | | | | | | | 295 | | | | 300 | | | |
| Ser | Ala | Arg | Phe | Val | Thr | Val | Pro | Leu | His | His | Arg | Met | Ala | Ser | Ala |
| | 305 | | | | | 310 | | | | 315 | | | | | 320 |
| Ile | Lys | Cys | Gln | Tyr | His | Phe | Ala | Asp | Thr | Trp | Met | Met | Phe | Ser | Glu |
| | 325 | | | | | | | | 330 | | | | 335 | | |
| Ile | Thr | Phe | Gln | Ser | Asp | Ala | Ala | Met | Tyr | Asn | Asn | Ser | Glu | Ala | Leu |
| | 340 | | | | | | | 345 | | | | 350 | | | |
| Pro | Thr | Ser | Pro | Met | Ala | Pro | Thr | Thr | Tyr | Asp | Pro | Met | Leu | Lys | Val |
| | 355 | | | | | | | 360 | | | | 365 | | | |
| Asp | Asp | Ser | Asn | Thr | Arg | Ile | Leu | Ile | Gly | Cys | Leu | Val | Ala | Ile | Ile |
| | 370 | | | | | | | 375 | | | | 380 | | | |
| Phe | Ile | Leu | Leu | Ala | Ile | Ile | Val | Ile | Ile | Leu | Trp | Arg | Gln | Phe | Trp |
| | 385 | | | | | | | 390 | | | | 395 | | | 400 |
| Gln | Lys | Met | Leu | Glu | Lys | Ala | Ser | Arg | Arg | Met | Leu | Asp | Asp | Glu | Met |
| | 405 | | | | | | | 410 | | | | 415 | | | |
| Thr | Val | Ser | Leu | Ser | Leu | Pro | Ser | Asp | Ser | Ser | Met | Phe | Asn | Asn | Asn |
| | 420 | | | | | | | 425 | | | | 430 | | | |
| Arg | Ser | Ser | Pro | Ser | Glu | Gln | Gly | Ser | Asn | Ser | Thr | Tyr | Asp | Arg | |
| | 435 | | | | | | | 440 | | | | 445 | | | |
| Ile | Phe | Pro | Leu | Arg | Pro | Asp | Tyr | Gln | Glu | Pro | Ser | Arg | Leu | Ile | Arg |
| | 450 | | | | | | | 455 | | | | 460 | | | |
| Lys | Leu | Pro | Glu | Phe | Ala | Pro | Gly | Glu | Glu | Ser | Gly | Cys | Ser | Gly | |
| | 465 | | | | | | | 470 | | | | 475 | | | 480 |
| Val | Val | Lys | Pro | Val | Gln | Pro | Ser | Gly | Pro | Glu | Gly | Val | Pro | His | Tyr |
| | 485 | | | | | | | 490 | | | | | 495 | | |
| Ala | Glu | Ala | Asp | Ile | Val | Asn | Leu | Gln | Gly | Val | Thr | Gly | Gly | Asn | Thr |
| | 500 | | | | | | | 505 | | | | 510 | | | |
| Tyr | Ser | Val | Pro | Ala | Val | Thr | Met | Asp | Leu | Leu | Ser | Gly | Lys | Arg | Cys |

| | | |
|---|-----|-----|
| 515 | 520 | 525 |
| Gly Cys Gly Arg Glu Phe Pro Pro Gly Lys Leu Leu Thr Phe Lys Glu | | |
| 530 | 535 | 540 |
| Lys Leu Gly Glu Gly Glu Phe Gly Glu Val His Leu Cys Glu Val Glu | | |
| 545 | 550 | 555 |
| Gly Met Glu Lys Phe Lys Asp Lys Asp Phe Ala Leu Asp Val Ser Ala | | 560 |
| 565 | 570 | 575 |
| Asn Gln Pro Val Leu Val Ala Val Lys Met Leu Arg Ala Asp Ala Asn | | |
| 580 | 585 | 590 |
| Lys Asn Ala Arg Asn Asp Phe Leu Lys Glu Ile Lys Ile Met Ser Arg | | |
| 595 | 600 | 605 |
| Leu Lys Asp Pro Asn Ile Ile His Leu Leu Ser Val Cys Ile Thr Asp | | |
| 610 | 615 | 620 |
| Asp Pro Leu Cys Met Ile Thr Glu Tyr Met Glu Asn Gly Asp Leu Asn | | |
| 625 | 630 | 635 |
| Gln Phe Leu Ser Arg His Glu Pro Pro Asn Ser Ser Ser Asp Val | | 640 |
| 645 | 650 | 655 |
| Arg Thr Val Ser Tyr Thr Asn Leu Lys Phe Met Ala Thr Gln Ile Ala | | |
| 660 | 665 | 670 |
| Ser Gly Met Lys Tyr Leu Ser Ser Leu Asn Phe Val His Arg Asp Leu | | |
| 675 | 680 | 685 |
| Ala Thr Arg Asn Cys Leu Val Gly Lys Asn Tyr Thr Ile Lys Ile Ala | | |
| 690 | 695 | 700 |
| Asp Phe Gly Met Ser Arg Asn Leu Tyr Ser Gly Asp Tyr Tyr Arg Ile | | |
| 705 | 710 | 715 |
| Gln Gly Arg Ala Val Leu Pro Ile Arg Trp Met Ser Trp Glu Ser Ile | | 720 |
| 725 | 730 | 735 |
| Leu Leu Gly Lys Phe Thr Thr Ala Ser Asp Val Trp Ala Phe Gly Val | | |
| 740 | 745 | 750 |
| Thr Leu Trp Glu Thr Phe Thr Phe Cys Gln Arg Lys Gly Pro Tyr Ser | | |
| 755 | 760 | 765 |
| Gln Leu Ser Asp Glu Thr Gly Tyr Xaa Arg Asn Thr Gly Glu Phe Phe | | |
| 770 | 775 | 780 |
| Pro Arg Pro Lys Gly Gly Gln Thr Tyr Leu Pro Ser Thr Ser Pro Phe | | |
| 785 | 790 | 795 |
| Val Pro Asp Ser Cys Val Ile Lys Leu Met Leu Ser Cys Trp Arg Arg | | 800 |
| 805 | 810 | 815 |
| Asp Thr Lys Asn Arg Pro Ser Phe Gln Glu Ile His Leu Leu Leu | | |
| 820 | 825 | 830 |
| Gln Gln Gly Asp Glu Arg Cys Cys Gln Cys Leu Ala Met Phe Leu Arg | | |
| 835 | 840 | 845 |
| Leu Arg Ser Ser Leu Gln Asp Leu Pro Leu Thr His Ala Tyr Ala Thr | | |
| 850 | 855 | 860 |
| Pro Ser Gly His Leu Met Lys Leu Arg Asp Arg Gly Leu Phe Ala Leu | | |
| 865 | 870 | 875 |
| Pro Ser Phe Pro Gly His Pro His Ser Leu Pro Leu Thr His Ile Tyr | | 880 |
| 885 | 890 | 895 |
| Phe Phe Phe Phe Thr Leu Lys Asn | | |
| 900 | 904 | |

<210> 1080

<211> 304

<212>Amino acid

<213> Homo sapiens

| | | | |
|---|---|----|----|
| <400> 1080 | | | |
| Cys Ser Ala Ser Pro Leu Arg Pro Gly Leu Leu Ala Pro Asp Leu Leu | | | |
| 1 | 5 | 10 | 15 |
| Tyr Leu Pro Gly Ala Gly Gln Pro Arg Arg Pro Glu Ala Glu Pro Gly | | | |

| | | |
|---|-----|-----|
| 20 | 25 | 30 |
| Gln Lys Pro Val Val Pro Thr Leu Tyr Val Thr Glu Ala Glu Ala His | | |
| 35 | 40 | 45 |
| Ser Pro Ala Leu Pro Gly Leu Ser Gly Pro Gln Pro Lys Trp Val Glu | | |
| 50 | 55 | 60 |
| Val Glu Glu Thr Ile Glu Val Arg Val Lys Lys Met Gly Pro Gln Gly | | |
| 65 | 70 | 75 |
| Val Ser Pro Thr Thr Glu Val Pro Arg Ser Ser Ser Gly His Leu Phe | | |
| 85 | 90 | 95 |
| Thr Leu Pro Gly Ala Thr Pro Gly Gly Asp Pro Asn Ser Asn Asn Ser | | |
| 100 | 105 | 110 |
| Asn Asn Lys Leu Leu Ala Gln Glu Ala Trp Ala Gln Gly Thr Thr Ala Met | | |
| 115 | 120 | 125 |
| Val Gly Val Arg Glu Pro Leu Val Phe Arg Val Asp Ala Arg Gly Ser | | |
| 130 | 135 | 140 |
| Val Asp Trp Ala Ala Ser Gly Met Gly Ser Leu Glu Glu Glu Gly Thr | | |
| 145 | 150 | 155 |
| Met Glu Glu Ala Gly Glu Glu Glu Gly Glu Asp Gly Asp Ala Phe Val | | |
| 165 | 170 | 175 |
| Thr Glu Glu Ser Gln Asp Thr His Ser Leu Gly Asp Arg Asp Pro Lys | | |
| 180 | 185 | 190 |
| Ile Leu Thr His Asn Gly Arg Met Leu Thr Leu Ala Asp Leu Glu Asp | | |
| 195 | 200 | 205 |
| Tyr Val Pro Gly Glu Gly Glu Thr Phe His Cys Gly Gly Pro Gly Pro | | |
| 210 | 215 | 220 |
| Gly Ala Pro Asp Asp Pro Pro Cys Glu Val Ser Val Ile Gln Arg Glu | | |
| 225 | 230 | 235 |
| Ile Gly Glu Pro Thr Val Gly Ser Leu Cys Cys Ser Ala Trp Gly Met | | |
| 245 | 250 | 255 |
| His Trp Val Pro Glu Ala Leu Ser Ala Ser Leu Gly Leu Ser Pro Met | | |
| 260 | 265 | 270 |
| Gly Arg His His Arg Asp Pro Arg Ser Val Ala Leu Arg Ala Pro Pro | | |
| 275 | 280 | 285 |
| Ser Ser Cys Gly Arg Pro Arg Leu Gly Leu Trp Ala Val Leu Pro Gly | | |
| 290 | 295 | 300 |
| | | 304 |

<210> 1081
 <211> 139
 <212>Amino acid
 <213> Homo sapiens

| | | | |
|---|-----|-----|----|
| <400> 1081 | | | |
| Gln Gly Leu Ala Ala Glu Phe Leu Gln Val Pro Ala Val Thr Arg Ala | | | |
| 1 | 5 | 10 | 15 |
| Tyr Thr Ala Ala Cys Val Leu Thr Thr Ala Ala Val Gln Leu Glu Leu | | | |
| 20 | 25 | 30 | |
| Leu Ser Pro Phe Gln Leu Tyr Phe Asn Pro His Leu Val Phe Arg Lys | | | |
| 35 | 40 | 45 | |
| Phe Gln Ala Pro Phe Leu Pro Trp Ala Leu Met Gly Phe Ser Leu Leu | | | |
| 50 | 55 | 60 | |
| Leu Gly Asn Ser Ile Leu Val Asp Leu Leu Gly Ile Ala Val Gly His | | | |
| 65 | 70 | 75 | 80 |
| Ile Tyr Tyr Phe Leu Glu Asp Val Phe Pro Asn Gln Pro Gly Gly Lys | | | |
| 85 | 90 | 95 | |
| Arg Leu Leu Gln Thr Pro Gly Phe Leu Gly Leu Gln Ser Ser Lys Ala | | | |
| 100 | 105 | 110 | |
| Pro Ala Gly Ser Ser Leu Thr Ile Trp Thr Gln Gln Ser Gln Gly Gly | | | |

| | | |
|---|-----|-----|
| 115 | 120 | 125 |
| Pro Gly Thr Ala Gly Glu Leu Ala Ala Pro Ser | | |
| 130 | 135 | 139 |

<210> 1082
<211> 1105
<212> Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1105)
<223> X = any amino acid or stop code

<400> 1082
Glu Lys Asn Ala Leu Glu Pro Thr Val Tyr Phe Gly Met Gly Val Xaa
1 5 10 15
Ala Pro Gln Val Pro Arg Phe Gln Gln Arg Ile Thr Gly Tyr Gln Tyr
20 25 30
Tyr Leu Gln Leu Arg Lys Asp Ile Trp Glu Gly Ile Pro Cys Thr
35 40 45
Leu Glu Gln Pro Ile His Leu Ala Gly Leu Ala Val Gln Ala Ile Phe
50 55 60
Gly Asp Phe Asp Gln Tyr Glu Ser Gln Asp Phe Leu Gln Lys Phe Ala
65 70 75 80
Leu Phe Pro Val Gly Trp Leu Gln Asp Glu Lys Val Leu Glu Glu Ala
85 90 95
Thr Gln Lys Val Ala Leu Leu His Gln Lys Tyr Arg Gly Leu Thr Ala
100 105 110
Pro Asp Ala Glu Met Leu Tyr Met Gln Glu Val Glu Arg Met Asp Gly
115 120 125
Tyr Gly Glu Ser Tyr Pro Ala Lys Asp Ser Gln Gly Ser Asp Ile
130 135 140
Ser Ile Gly Ala Cys Leu Glu Gly Ile Phe Val Lys His Lys Asn Gly
145 150 155 160
Arg His Pro Val Val Phe Arg Trp His Asp Ile Ala Asn Met Ser His
165 170 175
Asn Lys Ser Phe Phe Ala Leu Glu Leu Ala Asn Lys Glu Glu Thr Ile
180 185 190
Gln Phe Gln Thr Glu Asp Met Glu Thr Ala Lys Tyr Ile Trp Arg Leu
195 200 205
Cys Val Ala Arg His Lys Phe Tyr Arg Leu Asn Gln Cys Asn Leu Gln
210 215 220
Thr Gln Thr Val Thr Val Asn Pro Ile Arg Arg Arg Ser Ser Arg
225 230 235 240
Met Ser Leu Pro Lys Pro Gln Pro Tyr Val Met Pro Pro Pro Pro Gln
245 250 255
Leu His Tyr Asn Gly His Tyr Thr Glu Pro Tyr Ala Ser Ser Gln Asp
260 265 270
Asn Leu Phe Val Pro Asn Gln Glu Gly Tyr Tyr Gly Gln Phe Gln Thr
275 280 285
Ser Leu Asn Arg Ala Gln Ile Asp Phe Asn Gly Arg Ile Arg Asn Ala
290 295 300
Ser Val Tyr Ser Ala His Ser Thr Asn Ser Leu Asn Asn Pro Gln Pro
305 310 315 320
Tyr Leu Gln Pro Ser Pro Met Ser Ser Asn Pro Ser Ile Thr Gly Ser
325 330 335
Asp Val Met Arg Pro Asp Tyr Leu Pro Ser His Arg His Ser Ala Val
340 345 350

Ile Pro Pro Ser Tyr Arg Pro Thr Pro Asp Tyr Glu Thr Val Met Lys
 355 360 365
 Gln Leu Asn Arg Gly Leu Val His Ala Glu Arg Gln Ser His Ser Leu
 370 375 380
 Arg Asn Leu Asn Ile Gly Ser Ser Tyr Ala Tyr Ser Arg Pro Ala Ala
 385 390 395 400
 Leu Val Tyr Ser Gln Pro Glu Ile Arg Glu His Ala Gln Leu Pro Ser
 405 410 415
 Pro Ala Ala Ala His Cys Pro Phe Ser Leu Ser Tyr Ser Phe His Ser
 420 425 430
 Pro Ser Pro Tyr Pro Tyr Pro Ala Glu Arg Arg Pro Val Val Gly Ala
 435 440 445
 Val Ser Val Pro Glu Leu Thr Asn Ala Gln Leu Gln Ala Gln Asp Tyr
 450 455 460
 Pro Ser Pro Asn Ile Met Arg Thr Gln Val Tyr Arg Pro Pro Pro Pro
 465 470 475 480
 Tyr Pro Pro Pro Arg Pro Ala Asn Ser Thr Pro Asp Leu Ser Arg His
 485 490 495
 Leu Tyr Ile Ser Ser Ser Asn Pro Asp Leu Ile Thr Arg Arg Val His
 500 505 510
 His Ser Val Gln Thr Phe Gln Glu Asp Ser Leu Pro Val Ala His Ser
 515 520 525
 Leu Gln Glu Val Ser Glu Pro Leu Thr Ala Ala Arg His Ala Gln Leu
 530 535 540
 His Lys Arg Asn Ser Ile Glu Val Ala Gly Leu Ser His Gly Leu Glu
 545 550 555 560
 Gly Leu Arg Leu Lys Glu Arg Thr Leu Ser Ala Ser Ala Ala Glu Val
 565 570 575
 Ala Pro Arg Ala Val Ser Val Gly Ser Gln Pro Ser Val Phe Thr Glu
 580 585 590
 Arg Thr Gln Arg Glu Gly Pro Glu Glu Ala Glu Gly Leu Arg Tyr Gly
 595 600 605
 His Lys Lys Ser Leu Ser Asp Ala Thr Met Leu Ile His Ser Ser Glu
 610 615 620
 Glu Glu Glu Asp Glu Asp Phe Glu Glu Glu Ser Gly Ala Arg Ala Pro
 625 630 635 640
 Pro Ala Arg Ala Arg Glu Pro Arg Pro Gly Leu Ala Gln Asp Pro Pro
 645 650 655
 Gly Cys Pro Arg Val Leu Leu Ala Gly Pro Leu His Ile Leu Glu Pro
 660 665 670
 Lys Ala His Val Pro Asp Ala Glu Lys Arg Met Met Asp Ser Ser Pro
 675 680 685
 Val Arg Thr Thr Ala Glu Ala Gln Arg Pro Trp Arg Asp Gly Leu Leu
 690 695 700
 Met Pro Ser Met Ser Glu Ser Asp Leu Thr Thr Ser Gly Arg Tyr Arg
 705 710 715 720
 Ala Arg Arg Asp Ser Leu Lys Lys Arg Pro Val Ser Asp Leu Leu Ser
 725 730 735
 Gly Lys Lys Asn Ile Val Glu Gly Leu Pro Pro Leu Gly Gly Met Lys
 740 745 750
 Lys Thr Arg Val Asp Ala Lys Lys Ile Gly Pro Leu Lys Leu Ala Ala
 755 760 765
 Leu Asn Gly Leu Ser Leu Ser Arg Val Pro Leu Pro Asp Glu Gly Lys
 770 775 780
 Glu Val Ala Thr Arg Ala Thr Asn Asp Glu Arg Cys Lys Ile Leu Glu
 785 790 795 800
 Gln Arg Leu Glu Gln Gly Met Val Phe Thr Glu Tyr Glu Arg Ile Leu
 805 810 815
 Lys Lys Arg Leu Val Asp Gly Glu Cys Ser Thr Ala Arg Leu Pro Glu
 820 825 830
 Asn Ala Glu Arg Asn Arg Phe Gln Asp Val Leu Pro Tyr Asp Asp Val
 835 840 845
 Arg Val Glu Leu Val Pro Thr Lys Glu Asn Asn Thr Gly Tyr Ile Asn
 850 855 860

Ala Ser His Ile Lys Val Ser Val Ser Gly Ile Glu Trp Asp Tyr Ile
 865 870 875 880
 Ala Thr Gln Gly Pro Leu Gln Asn Thr Cys Gln Asp Phe Trp Gln Met
 885 890 895
 Val Trp Glu Gln Gly Ile Ala Ile Ile Ala Met Val Thr Ala Glu Glu
 900 905 910
 Glu Gly Gly Arg Glu Lys Ser Phe Arg Tyr Trp Pro Arg Leu Gly Ser
 915 920 925
 Arg His Asn Thr Val Thr Tyr Gly Arg Phe Lys Ile Thr Thr Arg Phe
 930 935 940
 Arg Thr Asp Ser Gly Cys Tyr Ala Thr Thr Gly Leu Lys Met Lys His
 945 950 955 960
 Leu Leu Thr Gly Gln Glu Arg Thr Val Trp His Leu Gln Tyr Thr Asp
 965 970 975
 Trp Pro Glu His Gly Cys Pro Glu Asp Leu Lys Gly Phe Leu Ser Tyr
 980 985 990
 Leu Glu Glu Ile Gln Ser Val Arg Arg His Thr Asn Ser Thr Ser Asp
 995 1000 1005
 Pro Gln Ser Pro Asn Pro Leu Leu Val His Cys Ser Ala Gly Val
 1010 1015 1020
 Gly Arg Thr Gly Val Val Ile Leu Ser Glu Ile Met Ile Ala Cys Leu
 1025 1030 1035 1040
 Glu His Asn Glu Val Leu Asp Ile Pro Arg Val Leu Asp Met Leu Arg
 1045 1050 1055
 Gln Gln Arg Met Met Leu Val Gln Thr Leu Cys Gln Tyr Thr Phe Val
 1060 1065 1070
 Tyr Arg Val Leu Ile Gln Val Pro Glu Lys Ala Pro Arg Leu Ile Leu
 1075 1080 1085
 Ser Ser Pro Gln Phe Pro Tyr Gly Ala Gln Sér Cys Glu Ala Phe Thr
 1090 1095 1100
 Ala
 1105

```

<210> 1083
<211> 99
<212>Amino acid
<213> Homo sapiens

<220>.
<221> misc_feature
<222> (1)...(99)
<223> X = any amino acid or stop code
  
```

<400> 1083
 Arg Lys Lys Gln Lys Leu Ala Glu Glu Xaa Val Glu Leu Ser Lys Leu
 1 5 10 15
 Ala Asp Leu Lys Asp Ala Glu Ala Val Gln Lys Phe Phe Leu Glu Glu
 20 25 30
 Ile Xaa Leu Gly Glu Glu Ile Leu Ala Lys Gly Val Asp His Leu Thr
 35 40 45
 Asn Pro Ser Ala Val Cys Gly Gln Pro Gln Trp Leu Leu Gln Val Leu
 50 55 60
 Gln Gln Thr Leu Pro Leu Pro Val Ile Gln Met Leu Leu Thr Lys Pro
 65 70 75 80
 Leu Pro Val Asn Gln Arg Leu Val Ser Ala Gly Ser Leu Ala Lys Asp
 85 90 95
 Asp Val Glu
 99

```

<210> 1084
<211> 206
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(206)
<223> X = any amino acid or stop code

```

```

<400> 1084
Ser Phe Cys Leu His Glu Phe Gly Trp Leu Gly Ser Ser Pro Gln Ser
 1           5          10          15
Asp His Pro Val Pro Ala Leu Leu Gly Leu Gly Ala Phe Val His His
 20          25          30
Ser Leu Leu Gln Val His Ser Ser Pro Gly Ala Gly Pro Val Ser Phe
 35          40          45
Leu Phe Leu Gly Glu Ser Cys Ser Pro Val Asp Glu Pro Arg Cys Val
 50          55          60
Pro Ser Cys Ala Phe Phe Gly Leu Ser Cys Phe Pro Leu Leu Asn Ser
 65          70          75          80
Ala Ala Leu Glu Arg Gly Leu Phe Phe Phe Val Val Phe Phe Phe Leu
 85          90          95
Glu Ser Gly Ser Cys Gln Val Ala Arg Ala Gly Val Arg Asp Arg Asp
100         105         110
Arg Gly Ser Leu Gln Pro Pro Pro Gly Leu Lys Gln Phe Cys Leu
115         120         125
Ser Leu Pro Ser Arg Trp Asp His Arg His Pro Pro Pro Leu Arg Val
130         135         140
Pro Xaa Phe Val Phe Val Phe Leu Val Glu Leu Gly Phe His His Val
145         150         155         160
Ala Gln Ala Gly Leu Lys Leu Leu Thr Leu Ser Asp Pro Pro Ala Pro
165         170         175
Ala Ser His Ser Ala Gly Ile Thr Gly Val Ser Gln Arg Asp Gln Pro
180         185         190
Val Leu Phe Leu Arg Trp Ala Ser Cys Ser Glu Leu Val Gly
195         200         205 206

```

```

<210> 1085
<211> 99
<212>Amino acid
<213> Homo sapiens

```

```

<400> 1085
Glu Gly Phe Pro Gly Arg Ser Leu Ser Gly Gly Leu Cys Cys Arg Leu
 1           5          10          15
Arg Arg Arg Phe Pro Ile Asp Gly Tyr Arg Pro Arg Arg Arg Arg Arg
 20          25          30
Trp Ser Cys Cys Pro Ser Gly Val Arg Pro Val Arg Arg Met Ser Gln
 35          40          45
Lys Ser Trp Ile Glu Ser Thr Leu Thr Lys Arg Glu Cys Val Tyr Ile
 50          55          60
Ile Pro Ser Ser Lys Asp Pro His Arg Cys Leu Pro Gly Cys Gln Ile
 65          70          75          80

```

Cys Gln Gln Leu Val Arg Arg Gly Phe Thr Val Leu Ala Arg Met Val
 85 90 95
 Ser Ile Ser
 99

<210> 1086
 <211> 53
 <212>Amino acid
 <213> Homo sapiens

<400> 1086
 Gln Asn Ser Thr Cys Leu Thr Ala Gln Thr His Ser Leu Leu Gln His
 1 5 10 15
 Gln Pro Leu Gln Leu Thr Thr Leu Leu Asp Gln Tyr Ile Arg Glu Gln
 20 25 30
 Arg Glu Lys Asp Ser Val Met Ser Ala Asn Gly Lys Pro Asp Pro Asp
 35 40 45
 Thr Val Pro Asp Ser
 50 53

<210> 1087
 <211> 250
 <212>Amino acid
 <213> Homo sapiens

<400> 1087
 Leu Asn Pro Trp Lys Asn Ala Leu Gln Asp Phe Cys Leu Pro Phe Leu
 1 5 10 15
 Arg Ile Thr Ser Leu Leu Gln His His Leu Phe Gly Glu Asp Leu Pro
 20 25 30
 Ser Cys Gln Glu Glu Glu Glu Phe Ser Val Leu Ala Ser Cys Leu Gly
 35 40 45
 Leu Leu Pro Thr Phe Tyr Gln Thr Glu His Pro Phe Ile Ser Ala Ser
 50 55 60
 Cys Leu Asp Trp Pro Val Pro Ala Phe Asp Ile Ile Thr His Trp Cys
 65 70 75 80
 Phe Glu Ile Lys Ser Phe Thr Glu Arg His Ala Glu Gln Gly Lys Ala
 85 90 95
 Leu Leu Ile Glu Ser Lys Trp Lys Leu Pro His Leu Leu Gln Leu
 100 105 110
 Pro Glu Asn Tyr Asn Thr Ile Phe Gln Tyr Tyr His Arg Lys Thr Cys
 115 120 125
 Ser Val Cys Thr Lys Val Pro Lys Asp Pro Ala Val Cys Leu Val Cys
 130 135 140
 Gly Thr Phe Val Cys Leu Lys Gly Leu Cys Cys Lys Gln Gln Ser Tyr
 145 150 155 160
 Cys Glu Cys Val Leu His Ser Gln Asn Cys Gly Ala Gly Thr Gly Ile
 165 170 175
 Phe Leu Leu Ile Asn Ala Ser Val Ile Ile Ile Arg Gly His Arg
 180 185 190
 Phe Cys Leu Trp Gly Ser Val Tyr Leu Asp Ala His Gly Glu Glu Asp
 195 200 205
 Arg Asp Leu Arg Arg Gly Lys Pro Leu Tyr Ile Cys Lys Glu Arg Tyr
 210 215 220

| | | | | | | | |
|---|-----|-----|-----|---|--|-----|-----|
| Lys Val Leu Glu Gln Gln Trp Ile Ser His Thr Phe Asp His Ile Asn | | | | | | | |
| 225 | 230 | 235 | 240 | Lys Arg Trp Gly Pro His Tyr Asn Gly Leu | | 245 | 250 |
| 235 | 240 | | | | | | |
| Lys Arg Trp Gly Pro His Tyr Asn Gly Leu | | | | | | | |
| 245 | 250 | | | | | | |

<210> 1088
<211> 455
<212>Amino acid
<213> Homo sapiens

| | | | |
|---|-----|-----|-----|
| <400> 1088 | | | |
| Lys Gly Gln Leu Val Asn Leu Leu Pro Pro Glu Asn Phe Pro Trp Cys | | | |
| 1 | 5 | 10 | 15 |
| Gly Gly Ser Gln Gly Pro Arg Met Leu Arg Thr Cys Tyr Val Leu Cys | | | |
| 20 | 25 | 30 | |
| Ser Gln Ala Gly Pro Arg Ser Arg Gly Trp Gln Ser Leu Ser Phe Asp | | | |
| 35 | 40 | 45 | |
| Gly Gly Ala Phe His Leu Lys Gly Thr Gly Glu Leu Thr Arg Ala Leu | | | |
| 50 | 55 | 60 | |
| Leu Val Leu Arg Leu Cys Ala Trp Pro Pro Leu Val Thr His Gly Leu | | | |
| 65 | 70 | 75 | 80 |
| Leu Leu Gln Ala Trp Ser Arg Arg Leu Leu Gly Ser Arg Leu Ser Gly | | | |
| 85 | 90 | 95 | |
| Ala Phe Leu Arg Ala Ser Val Tyr Gly Gln Phe Val Ala Gly Glu Thr | | | |
| 100 | 105 | 110 | |
| Ala Glu Glu Val Lys Gly Cys Val Gln Gln Leu Arg Thr Leu Ser Leu | | | |
| 115 | 120 | 125 | |
| Arg Pro Leu Leu Ala Val Pro Thr Glu Glu Pro Asp Ser Ala Ala | | | |
| 130 | 135 | 140 | |
| Lys Ser Gly Glu Ala Trp Tyr Glu Gly Asn Leu Gly Ala Met Leu Arg | | | |
| 145 | 150 | 155 | 160 |
| Cys Val Asp Leu Ser Arg Gly Leu Leu Glu Pro Pro Ser Leu Ala Glu | | | |
| 165 | 170 | 175 | |
| Ala Ser Leu Met Gln Leu Lys Val Thr Ala Leu Thr Ser Thr Arg Leu | | | |
| 180 | 185 | 190 | |
| Cys Lys Glu Leu Ala Ser Trp Val Arg Arg Pro Gly Ala Ser Leu Glu | | | |
| 195 | 200 | 205 | |
| Leu Ser Pro Glu Arg Leu Ala Glu Ala Met Asp Ser Gly Gln Asn Leu | | | |
| 210 | 215 | 220 | |
| Gln Val Ser Cys Leu Asn Ala Glu Gln Asn Gln His Leu Arg Ala Ser | | | |
| 225 | 230 | 235 | 240 |
| Leu Ser Arg Leu His Arg Val Ala Gln Tyr Ala Arg Ala Gln His Val | | | |
| 245 | 250 | 255 | |
| Arg Leu Leu Val Asp Ala Glu Tyr Thr Ser Leu Asn Pro Ala Leu Ser | | | |
| 260 | 265 | 270 | |
| Leu Leu Val Ala Ala Leu Ala Val Arg Trp Asn Ser Pro Gly Glu Gly | | | |
| 275 | 280 | 285 | |
| Gly Pro Trp Val Trp Asn Thr Tyr Gln Ala Cys Leu Lys Asp Thr Phe | | | |
| 290 | 295 | 300 | |
| Glu Arg Leu Gly Arg Asp Ala Glu Ala Ala His Arg Ala Gly Leu Ala | | | |
| 305 | 310 | 315 | 320 |
| Phe Gly Val Lys Leu Val Arg Gly Ala Tyr Leu Asp Lys Glu Arg Ala | | | |
| 325 | 330 | 335 | |
| Val Ala Gln Leu His Gly Met Glu Asp Pro Pro Thr Gln Ala Asp Tyr | | | |
| 340 | 345 | 350 | |
| Glu Ala Thr Ser Gln Ser Tyr Ser Arg Cys Leu Glu Leu Met Leu Thr | | | |
| 355 | 360 | 365 | |
| His Val Ala Arg His Gly Pro Met Cys His Leu Met Val Ala Ser His | | | |
| 370 | 375 | 380 | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asn | Glu | Glu | Ser | Val | Arg | Gln | Ala | Thr | Lys | Gly | Gln | Ala | Gly | Tyr | Val |
| 385 | | | | 390 | | | | | 395 | | | | | 400 | |
| Val | Tyr | Lys | Ser | Ile | Pro | Tyr | Gly | Ser | Leu | Glu | Glu | Val | Ile | Pro | Tyr |
| | | | | 405 | | | | | 410 | | | | | 415 | |
| Leu | Ile | Arg | Arg | Ala | Gln | Glu | Asn | Arg | Ser | Val | Leu | Gln | Gly | Ala | Arg |
| | | | | 420 | | | | | 425 | | | | | 430 | |
| Arg | Glu | Gln | Glu | Leu | Leu | Ser | Gln | Lys | Leu | Trp | Arg | Arg | Leu | Leu | Pro |
| | | | | 435 | | | | | 440 | | | | | 445 | |
| Gly | Cys | Arg | Arg | Ile | Pro | His | | | | | | | | | |
| | | | | 450 | | | 455 | | | | | | | | |

<210> 1089
<211> 243
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) . . . (243)
<223> X = any amino acid or stop code

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Val | Val | Glu | Phe | Gly | Glu | Met | Ser | Thr | Ala | Arg | Ala | Pro | Glu | Gly | Leu |
| 1 | | | | | | 5 | | | 10 | | | | | 15 | |
| Arg | Trp | Phe | Gln | Leu | Tyr | Val | His | Pro | Asp | Leu | Gln | Leu | Asn | Lys | Gln |
| | | | | | | 20 | | | 25 | | | | | 30 | |
| Leu | Ile | Gln | Arg | Val | Glu | Ser | Leu | Gly | Phe | Lys | Ala | Leu | Val | Ile | Thr |
| | | | | | | 35 | | | 40 | | | | | 45 | |
| Leu | Asp | Thr | Pro | Val | Cys | Gly | Asn | Arg | Arg | His | Asp | Ile | Arg | Asn | Gln |
| | | | | | | 50 | | | 55 | | | | | 60 | |
| Leu | Arg | Arg | Asn | Leu | Thr | Leu | Thr | Asp | Leu | Gln | Ser | Pro | Lys | Lys | Gly |
| | | | | | | 65 | | | 70 | | | 75 | | 80 | |
| Asn | Ala | Ile | Pro | Tyr | Phe | Gln | Met | Thr | Ile | Ser | Thr | Ser | Leu | Cys | |
| | | | | | | 85 | | | 90 | | | | | 95 | |
| Trp | Asn | Asp | Leu | Ser | Trp | Phe | Gln | Ser | Ile | Thr | Arg | Leu | Pro | Ile | Ile |
| | | | | | | 100 | | | 105 | | | | | 110 | |
| Leu | Lys | Gly | Ile | Leu | Thr | Lys | Glu | Asp | Ala | Glu | Leu | Ala | Val | Lys | His |
| | | | | | | 115 | | | 120 | | | | | 125 | |
| Asn | Val | Gln | Gly | Ile | Ile | Val | Ser | Asn | His | Gly | Gly | Arg | Gln | Leu | Asp |
| | | | | | | 130 | | | 135 | | | | | 140 | |
| Glu | Val | Leu | Ala | Ser | Ile | Asp | Ala | Leu | Thr | Glu | Val | Gly | Ala | Ala | Glu |
| | | | | | | 145 | | | 150 | | | 155 | | 160 | |
| Xaa | Gly | Asn | Met | Lys | Tyr | Tyr | Leu | Asp | Ala | Gly | Val | Arg | Thr | Gly | Asn |
| | | | | | | 165 | | | 170 | | | | | 175 | |
| Asp | Val | Gln | Lys | Ala | Leu | Ala | Leu | Gly | Ala | Lys | Cys | Ile | Phe | Leu | Gly |
| | | | | | | 180 | | | 185 | | | | | 190 | |
| Arg | Pro | Ile | Ile | Trp | Gly | Leu | Ala | Cys | Lys | Gly | His | Gly | Val | Lys | |
| | | | | | | 195 | | | 200 | | | | | 205 | |
| Glu | Val | Leu | Asn | Ile | Leu | Thr | Asn | Glu | Phe | His | Thr | Ser | Met | Ala | Leu |
| | | | | | | 210 | | | 215 | | | | | 220 | |
| Thr | Gly | Cys | Arg | Ser | Val | Ala | Glu | Ile | Asn | Arg | Asn | Leu | Val | Gln | Phe |
| | | | | | | 225 | | | 230 | | | 235 | | 240 | |
| Ser | Arg | Leu | | | | | | | | | | | | | |
| | | | | | | 243 | | | | | | | | | |

<210> 1090
<211> 90
<212>Amino acid

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(90)

<223> X = any amino acid or stop code

<400> 1090

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Phe | Phe | Leu | Arg | Trp | Ser | Phe | Thr | Leu | Leu | Pro | Arg | Leu | Glu | Cys | Gln |
| 1 | | | | 5 | | | | | 10 | | | | 15 | | |
| Trp | Leu | Asn | Leu | Gly | Ser | Leu | Gln | Pro | Pro | Pro | Gly | Phe | Lys | Xaa | |
| | | | | | | | | 20 | 25 | | | | 30 | | |
| Ser | Ser | Cys | Leu | Arg | Leu | Leu | Ser | Ser | Trp | Gly | Leu | Gln | Val | Pro | Thr |
| | | | | | | | 35 | 40 | | | | 45 | | | |
| Ser | Met | Leu | Gly | Xaa | Phe | Phe | Cys | Ile | Phe | Ser | Arg | Glu | Gly | Ile | Ser |
| | | | | | 50 | | 55 | | 60 | | | | | | |
| Pro | Cys | Trp | Pro | Gly | Trp | Ser | Gln | Thr | Pro | Lys | Val | Ile | His | Leu | Pro |
| | | | 65 | | 70 | | | 75 | | | | | 80 | | |
| Arg | Pro | Pro | Pro | Arg | Val | Leu | Arg | Leu | Gln | Ala | | | | | |
| | | | | | 85 | | | | 90 | | | | | | |

<210> 1091

<211> 259

<212> Amino acid

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(259)

<223> X = any amino acid or stop code

<400> 1091

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Leu | Cys | Phe | Val | His | Thr | Ala | Leu | Gln | Ser | Phe | Gln | Gly | Glu | Leu |
| 1 | | | | | 5 | | | | 10 | | | | 15 | | |
| Tyr | Glu | Pro | His | Val | Val | Ile | Ala | Ile | Val | Val | Phe | Leu | Val | Lys | Leu |
| | | | | | | 20 | | | 25 | | | | 30 | | |
| Gly | Ile | Cys | Lys | Xaa | Arg | Ala | Ser | Trp | Arg | Lys | Lys | Val | Thr | Leu | Val |
| | | | | | 35 | | | 40 | | | | 45 | | | |
| Val | Lys | Xaa | Ser | Leu | Lys | Ile | Cys | Phe | Thr | Lys | Tyr | Gly | Ser | Cys | Tyr |
| | | | | | | 50 | | 55 | | | 60 | | | | |
| His | Pro | Gly | Glu | Lys | Ser | Ser | Ser | Trp | Leu | Phe | Asn | Xaa | Arg | Met | Val |
| | | | | | | 65 | | 70 | | | 75 | | | 80 | |
| Asn | Asp | Cys | Leu | Ala | Thr | Ser | Cys | Ser | Asn | Arg | Ser | Phe | Val | Ile | Gln |
| | | | | | | 85 | | | 90 | | | | 95 | | |
| Gln | Ile | Pro | Ser | Ser | Asn | Leu | Phe | Met | Val | Val | Val | Asp | Ser | Ser | Cys |
| | | | | | | 100 | | | 105 | | | | 110 | | |
| Leu | Cys | Glu | Ser | Val | Ala | Pro | Ile | Thr | Met | Ala | Pro | Ile | Glu | Ile | Arg |
| | | | | | | 115 | | | 120 | | | 125 | | | |
| Tyr | Ile | Leu | Leu | Cys | Ala | Gly | Pro | Leu | Thr | Thr | Thr | Glu | Thr | Ser | Lys |
| | | | | | | 130 | | | 135 | | | 140 | | | |
| Gly | Tyr | Gln | Trp | Xaa | Gly | Asn | Leu | Gly | Glu | Lys | Tyr | Xaa | Arg | Arg | Lys |
| | | | | | | 145 | | | 150 | | | 155 | | | 160 |
| Ile | Thr | Ser | Phe | Pro | Leu | Leu | Glu | Arg | Glu | Ser | Ser | Xaa | Glu | Ser | Cys |
| | | | | | | 165 | | | 170 | | | 175 | | | |
| His | Cys | Gln | Ile | Leu | Thr | Ser | Glu | Met | Gln | Ser | Arg | Lys | Lys | Gln | Ser |

| | | |
|---|-----|-----|
| 180 | 185 | 190 |
| Leu Glu Thr Cys Leu Asn Tyr Ser Gln His Asn Glu Ser Leu Lys Cys | | |
| 195 | 200 | 205 |
| Glw Arg Leu Lys Ala Gln Lys Ile Arg Arg Arg Pro Glu Ser Cys His | | |
| 210 | 215 | 220 |
| Gly Phe His Pro Glu Glu Asn Ala Arg Glu Cys Gly Gly Ala Pro Ser | | |
| 225 | 230 | 235 |
| Leu Gln Ala Gln Thr Val Leu Leu Leu Pro Leu Leu Leu Met Leu | | |
| 245 | 250 | 255 |
| Phe Ser Arg | | |
| 259 | | |

<210> 1092
<211> 117
<212> Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> {1}...{17}
<223> X = any amino acid or stop code

| | | | |
|---|-----|-----|----|
| <400> 1092 | | | |
| Val Pro Ser Pro Thr His Asp Pro Lys Pro Ala Glu Ala Pro Met Pro | | | |
| 1 | 5 | 10 | 15 |
| Ala Xaa Pro Ala Pro Pro Gly Pro Ala Ser Pro Gly Gly Ala Leu Glu | | | |
| 20 | 25 | 30 | |
| Pro Pro Ala Ala Ala Arg Ala Gly Gly Ser Pro Thr Ala Val Arg Ser | | | |
| 35 | 40 | 45 | |
| Ile Leu Thr Lys Glu Arg Arg Pro Glu Gly Gly Tyr Lys Ala Val Trp | | | |
| 50 | 55 | 60 | |
| Phe Gly Glu Asp Ile Gly Thr Glu Ala Asp Val Val Val Leu Asn Ala | | | |
| 65 | 70 | 75 | 80 |
| Pro Thr Leu Asp Val Asp Gly Ala Ser Asp Ser Gly Ser Gly Asp Glu | | | |
| 85 | 90 | 95 | |
| Gly Glu Gly Ala Gly Arg Gly Gly Pro Tyr Asp Ala Pro Gly Gly | | | |
| 100 | 105 | 110 | |
| Asp Asp Ser Tyr Ile | | | |
| 115 | 117 | | |

<210> 1093
<211> 763
<212> Amino acid
<213> Homo sapiens

| | | | |
|---|----|----|----|
| <400> 1093 | | | |
| Leu Ile Ser Leu Ala Gly Pro Thr Asp Asp Ile Gln Ser Thr Gly Pro | | | |
| 1 | 5 | 10 | 15 |
| Gln Val His Ala Leu Asn Ile Leu Arg Ala Leu Phe Arg Asp Thr Arg | | | |
| 20 | 25 | 30 | |
| Leu Gly Glu Asn Ile Ile Pro Tyr Val Ala Asp Gly Ala Lys Ala Ala | | | |
| 35 | 40 | 45 | |
| Ile Leu Gly Phe Thr Ser Pro Val Trp Ala Val Arg Asn Ser Ser Thr | | | |
| 50 | 55 | 60 | |

Leu Leu Phe Ser Ala Leu Ile Thr Arg Ile Phe Gly Val Lys Arg Ala
 65 70 75 80
 Lys Asp Glu His Ser Lys Thr Asn Arg Met Thr Gly Arg Glu Phe Phe
 85 90 95
 Ser Arg Phe Pro Glu Leu Tyr Pro Phe Leu Leu Lys Gln Leu Glu Thr
 100 105 110
 Val Ala Asn Thr Val Asp Ser Asp Met Gly Glu Pro Asn Arg His Pro
 115 120 125
 Ser Met Phe Leu Leu Leu Val Leu Glu Arg Leu Tyr Ala Ser Pro
 130 135 140
 Met Asp Gly Thr Ser Ser Ala Leu Ser Met Gly Pro Phe Val Pro Phe
 145 150 155 160
 Ile Met Arg Cys Gly His Ser Pro Val Tyr His Ser Arg Glu Met Ala
 165 170 175
 Ala Arg Ala Leu Val Pro Phe Val Met Ile Asp His Ile Pro Asn Thr
 180 185 190
 Ile Arg Thr Leu Leu Ser Thr Leu Pro Ser Cys Thr Asp Gln Cys Phe
 195 200 205
 Arg Gln Asn His Ile His Gly Thr Leu Leu Gln Val Phe His Leu Val
 210 215 220
 Gln Ala Tyr Ser Asp Ser Lys His Gly Thr Asn Ser Asp Phe Gln His
 225 230 235 240
 Glu Leu Thr Asp Ile Thr Val Cys Thr Lys Ala Lys Leu Trp Leu Ala
 245 250 255
 Lys Arg Gln Asn Pro Cys Leu Val Thr Arg Ala Val Tyr Ile Asp Ile
 260 265 270
 Leu Phe Leu Leu Thr Cys Cys Leu Asn Arg Ser Ala Lys Asp Asn Gln
 275 280 285
 Pro Val Leu Glu Ser Leu Gly Phe Trp Glu Glu Val Arg Gly Ile Ile
 290 295 300
 Ser Gly Ser Glu Leu Ile Thr Gly Phe Pro Trp Ala Phe Lys Val Pro
 305 310 315 320
 Gly Leu Pro Gln Tyr Leu Gln Ser Leu Thr Arg Leu Ala Ile Ala Ala
 325 330 335
 Val Trp Ala Ala Ala Ala Lys Ser Gly Glu Arg Glu Thr Asn Val Pro
 340 345 350
 Ile Ser Phe Ser Gln Leu Leu Glu Ser Ala Phe Pro Glu Val Arg Ser
 355 360 365
 Leu Thr Leu Glu Ala Leu Leu Glu Lys Phe Leu Ala Ala Ser Gly
 370 375 380
 Leu Gly Glu Lys Gly Val Pro Pro Leu Leu Cys Asn Met Gly Glu Lys
 385 390 395 400
 Phe Leu Leu Leu Ala Met Lys Glu Asn His Pro Glu Cys Phe Cys Lys
 405 410 415
 Ile Leu Lys Ile Leu His Cys Met Asp Pro Gly Glu Trp Leu Pro Gln
 420 425 430
 Thr Glu His Cys Val His Leu Thr Pro Lys Glu Phe Leu Ile Trp Thr
 435 440 445
 Met Asp Ile Ala Ser Asn Glu Arg Ser Glu Ile Gln Ser Val Ala Leu
 450 455 460
 Arg Leu Ala Ser Lys Val Ile Ser His His Met Gln Thr Cys Val Glu
 465 470 475 480
 Asn Arg Glu Leu Ile Ala Ala Glu Leu Lys Gln Trp Val Gln Leu Val
 485 490 495
 Ile Leu Ser Cys Glu Asp His Leu Pro Thr Glu Ser Arg Leu Ala Val
 500 505 510
 Val Glu Val Leu Thr Ser Thr Pro Leu Phe Leu Thr Asn Pro His
 515 520 525
 Pro Ile Leu Glu Leu Gln Asp Thr Leu Ala Leu Trp Lys Cys Val Leu
 530 535 540
 Thr Leu Leu Gln Ser Glu Glu Gln Ala Val Arg Asp Ala Ala Thr Glu
 545 550 555 560
 Thr Val Thr Thr Ala Met Ser Gln Glu Asn Thr Cys Gln Ser Thr Glu
 565 570 575

Phe Ala Phe Cys Gln Val Asp Ala Ser Ile Ala Leu Ala Leu Ala Leu
 580 585 590
 Ala Val Cys Asp Leu Leu Gln Gln Trp Asp Gln Leu Ala Pro Gly
 595 600 605
 Leu Pro Ile Leu Leu Gly Trp Leu Leu Gly Glu Ser Asp Asp Leu Val
 610 615 620
 Ala Cys Val Glu Ser Met His Gln Val Glu Glu Asp Tyr Leu Phe Glu
 625 630 635 640
 Lys Ala Glu Val Asn Phe Trp Ala Glu Thr Leu Ile Phe Val Lys Tyr
 645 650 655
 Leu Cys Lys His Leu Phe Cys Leu Leu Ser Lys Ser Gly Trp Arg Pro
 660 665 670
 Pro Ser Pro Glu Met Leu Cys His Leu Gln Arg Met Val Ser Glu Gln
 675 680 685
 Cys His Leu Leu Ser Gln Phe Phe Arg Glu Leu Pro Pro Ala Ala Glu
 690 695 700
 Phe Val Lys Thr Val Glu Phe Thr Arg Leu Arg Ile Gln Glu Glu Arg
 705 710 715 720
 Thr Leu Ala Cys Leu Arg Leu Leu Ala Phe Leu Glu Gly Lys Glu Gly
 725 730 735
 Glu Asp Thr Leu Val Leu Ser Val Trp Asp Ser Tyr Ala Glu Ser Arg
 740 745 750
 Gln Leu Thr Leu Pro Arg Thr Glu Ala Ala Cys
 755 760 763

<210> 1094
<211> 413
<212>Amino acid
<213> Homo sapiens

<400> 1094
 His Ala Phe Arg Pro Ile Ala Leu Gln Arg Gly Val Ser Phe Arg Gly
 1 5 10 15
 Cys Ser Asn Gln Tyr Ala Glu Ser Arg Arg Leu Gln Gly Glu Ser Gly
 20 25 30
 Ser Arg Ala Phe Ala His Leu Met Glu Ser Leu Leu Gln His Leu Asp
 35 40 45
 Arg Phe Ser Glu Leu Leu Ala Val Ser Ser Thr Thr Tyr Val Ser Thr
 50 55 60
 Trp Asp Pro Ala Thr Val Arg Arg Ala Leu Gln Trp Ala Arg Tyr Leu
 65 70 75 80
 Arg His Ile His Arg Arg Phe Gly Arg His Gly Pro Ile Arg Thr Ala
 85 90 95
 Leu Glu Arg Arg Leu His Asn Gln Trp Arg Gln Glu Gly Phe Gly
 100 105 110
 Arg Gly Pro Val Pro Gly Leu Ala Asn Phe Gln Ala Leu Gly His Cys
 115 120 125
 Asp Val Leu Leu Ser Leu Arg Leu Leu Glu Asn Arg Ala Leu Gly Asp
 130 135 140
 Ala Ala Arg Tyr His Leu Val Gln Gln Leu Phe Pro Gly Pro Gly Val
 145 150 155 160
 Arg Asp Ala Asp Glu Glu Thr Leu Gln Glu Ser Leu Ala Arg Leu Ala
 165 170 175
 Arg Arg Arg Ser Ala Val His Met Leu Arg Phe Asn Gly Tyr Arg Glu
 180 185 190
 Asn Pro Asn Leu Gln Glu Asp Ser Leu Met Lys Thr Gln Ala Glu Leu
 195 200 205
 Leu Leu Glu Arg Leu Gln Glu Val Gly Lys Ala Glu Ala Glu Arg Pro
 210 215 220

Ala Arg Phe Leu Ser Ser Leu Trp Glu Arg Leu Pro Gln Asn Asn Phe
 225 230 235 240
 Leu Lys Val Ile Ala Val Ala Leu Leu Gln Pro Pro Leu Ser Arg Arg
 245 250 255
 Pro Gln Glu Leu Glu Pro Gly Ile His Lys Ser Pro Gly Glu Gly
 260 265 270
 Ser Gln Val Leu Val His Trp Leu Leu Gly Asn Ser Glu Val Phe Ala
 275 280 285
 Ala Phe Cys Arg Ala Leu Pro Ala Gly Leu Leu Thr Leu Val Thr Ser
 290 295 300
 Arg His Pro Ala Leu Ser Pro Val Tyr Leu Gly Leu Leu Thr Asp Trp
 305 310 315 320
 Gly Gln Arg Leu His Tyr Asp Leu Gln Lys Gly Ile Trp Val Gly Thr
 325 330 335
 Glu Ser Gln Asp Val Pro Trp Glu Glu His Asn Arg Phe Gln Ser
 340 345 350
 Leu Cys Gln Ala Pro Pro Pro Leu Lys Asp Lys Val Leu Thr Ala Leu
 355 360 365
 Glu Thr Cys Lys Ala Gln Asp Gly Asp Phe Glu Glu Pro Gly Leu Ser
 370 375 380
 Ile Trp Thr Asp Leu Leu Ala Leu Arg Ser Gly Ala Phe Arg Lys
 385 390 395 400
 Arg Gln Val Leu Gly Leu Ser Ala Gly Leu Ser Ser Val
 405 410 413

<210> 1095
 <211> 344
 <212>Amino acid
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(344)
 <223> X = any amino acid or stop code

<400> 1095
 Ser His Leu Ile Gln His Gln Arg Ile His Thr Xaa Glu Xaa Ala His
 1 5 10 15
 Glu Cys Asn Glu Cys Gly Lys Ala Phe Ser Gln Thr Ser Cys Leu Ile
 20 25 30
 Gln His His Lys Met His Arg Lys Glu Lys Ser Tyr Glu Cys Asn Glu
 35 40 45
 Tyr Glu Gly Ser Phe Ser His Ser Ser Asp Leu Ile Leu Gln Gln Glu
 50 55 60
 Val Leu Thr Arg Gln Lys Ala Phe Asp Cys Asp Val Trp Glu Lys Asn
 65 70 75 80
 Ser Ser Gln Arg Ala His Leu Val Gln His Gln Ser Ile His Thr Lys
 85 90 95
 Glu Lys Pro His Glu Cys Asn Glu Asp Gly Lys Ile Phe Asn Gln Ile
 100 105 110
 Gln Ala Leu Ile Gln His Leu Arg Val His Thr Arg Glu Lys Tyr Val
 115 120 125
 Cys Thr Ala Cys Gly Lys Ala Phe Ser His Ser Ser Ala Ile Ala Gln
 130 135 140
 His Gln Ile Ile His Thr Arg Glu Lys Pro Ser Glu Cys Asp Glu Xaa
 145 150 155 160
 Arg Lys Gly Ile Ser Val Lys Leu Leu Ile Asp Ser Cys Arg Ile Tyr
 165 170 175
 Thr Ser Glu Lys Ser Tyr Lys Cys Ile Glu Cys Gly Lys Phe Met

| | | |
|---|-----|-----|
| 180 | 185 | 190 |
| Leu Leu Val Phe Ser Tyr Leu Ser His Ile Trp Arg Ile His Met Gly | | |
| 195 | 200 | 205 |
| Ile Lys Phe His Cys Cys Asn Glu Cys Glu Lys Ala Ile Ser Gln Arg | | |
| 210 | 215 | 220 |
| Asn Tyr Leu Val Xaa Tyr Gln Ile His Ala Met Gln Lys Asp Tyr Lys | | |
| 225 | 230 | 235 |
| Cys Asn Glu Ala Cys Met Cys Val Arg Arg Phe Ser His Asn Pro Thr | | |
| 245 | 250 | 255 |
| Leu Ile Gln His Gln Arg Ile Tyr Thr Xaa Glu Asn Leu Phe Gly Cys | | |
| 260 | 265 | 270 |
| Ser Lys Cys Gly Arg Ser Phe Asn Arg Ser Leu Thr Ser Leu Cys His | | |
| 275 | 280 | 285 |
| Ile Arg Ile Ser Ile Arg Arg Gln Glu Phe Asp Val Thr Gln Met Glu | | |
| 290 | 295 | 300 |
| Lys Leu Asp Thr Thr Phe Gln Ala Ser Thr Gln His Arg Asn Asn Gly | | |
| 305 | 310 | 315 |
| Glu Lys Ile Val Asp Tyr Leu Phe Met Lys Leu Leu Ile His Ser Pro | | |
| 325 | 330 | 335 |
| Asn Leu Phe His Cys Thr Lys Ile | | |
| 340 | 344 | |

<210> 1096
<211> 76
<212>Amino acid
<213> Homo sapiens

| | | | |
|---|----|----|----|
| <400> 1096 | | | |
| Ala Val Thr Leu Thr Ala Lys Ile Cys Ser Phe Thr Pro Glu Pro Ser | | | |
| 1 | 5 | 10 | 15 |
| Glu Thr Met Ser Pro Pro Ala Gly Thr Asn Asn Ser Arg His Ala Ala | | | |
| 20 | 25 | 30 | |
| Leu Arg Ala Val Thr Leu Pro Val Lys Val Cys Ser Phe Thr Pro Glu | | | |
| 35 | 40 | 45 | |
| Pro Ala Arg Ser Arg Thr His Gln Lys Glu Glu Thr Pro Asn Thr Ser | | | |
| 50 | 55 | 60 | |
| Glu His Gln Lys Glu Gln Thr Pro Glu Ala Pro Pro | | | |
| 65 | 70 | 75 | 76 |

<210> 1097
<211> 1462
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1462)
<223> X = any amino acid or stop code

| | | | |
|---|----|----|----|
| <400> 1097 | | | |
| Met Ala Tyr Ser Trp Gln Thr Asp Pro Asn Pro Asn Glu Ser His Glu | | | |
| 1 | 5 | 10 | 15 |
| Lys Gln Tyr Glu His Gln Glu Phe Leu Phe Val Asn Gln Pro His Ser | | | |
| 20 | 25 | 30 | |

Ser Ser Gln Val Ser Leu Gly Phe Asp Gln Ile Val Asp Glu Ile Ser
 35 40 45
 Gly Lys Ile Pro His Tyr Ser Glu Ile Asp Glu Asn Thr Phe Phe
 50 55 60
 Val Pro Thr Ala Pro Lys Trp Asp Ser Thr Gly His Ser Leu Asn Glu
 65 70 75 80
 Ala His Gln Ile Ser Leu Asn Glu Phe Thr Ser Lys Ser Arg Glu Leu
 85 90 95
 Ser Trp His Gln Val Ser Lys Ala Pro Ala Ile Gly Phe Ser Pro Ser
 100 105 110
 Val Leu Pro Lys Pro Gln Asn Thr Asn Lys Glu Cys Ser Trp Gly Ser
 115 120 125
 Pro Ile Gly Lys His His Gly Ala Asp Asp Ser Arg Phe Ser Ile Leu
 130 135 140
 Ala Pro Ser Phe Thr Ser Leu Asp Lys Ile Asn Leu Glu Lys Glu Leu
 145 150 155 160
 Glu Asn Glu Asn His Asn Tyr His Ile Gly Phe Glu Ser Ser Ile Pro
 165 170 175
 Pro Thr Asn Ser Ser Phe Ser Ser Asp Phe Met Pro Lys Glu Glu Asn
 180 185 190
 Lys Arg Ser Gly His Val Asn Ile Val Glu Pro Ser Leu Met Leu Leu
 195 200 205
 Lys Gly Ser Leu Gln Pro Gly Met Trp Glu Ser Thr Trp Gln Lys Asn
 210 215 220
 Ile Glu Ser Ile Gly Cys Ser Ile Gln Leu Val Glu Val Pro Gln Ser
 225 230 235 240
 Ser Asn Thr Ser Leu Ala Ser Phe Cys Asn Lys Val Lys Lys Ile Arg
 245 250 255
 Glu Arg Tyr His Ala Ala Asp Val Asn Phe Asn Ser Gly Lys Ile Trp
 260 265 270
 Ser Thr Thr Ala Phe Pro Tyr Gln Leu Phe Ser Lys Thr Lys Phe
 275 280 285
 Asn Ile His Ile Phe Ile Asp Asn Ser Thr Gln Pro Leu His Phe Met
 290 295 300
 Pro Cys Ala Asn Tyr Leu Val Lys Asp Leu Ile Ala Glu Ile Leu His
 305 310 315 320
 Phe Cys Thr Asn Asp Gln Leu Leu Pro Lys Asp His Ile Leu Ser Val
 325 330 335
 Trp Gly Ser Glu Glu Phe Leu Gln Asn Asp His Cys Leu Gly Ser His
 340 345 350
 Lys Met Phe Gln Lys Asp Lys Ser Val Ile Gln Leu His Leu Gln Lys
 355 360 365
 Ser Arg Glu Ala Pro Gly Lys Leu Ser Arg Lys His Glu Glu Asp His
 370 375 380
 Ser Gln Phe Tyr Leu Asn Gln Leu Leu Glu Phe Met His Ile Trp Lys
 385 390 395 400
 Val Ser Arg Gln Cys Leu Leu Thr Leu Ile Arg Lys Tyr Asp Phe His
 405 410 415
 Leu Lys Tyr Leu Leu Lys Thr Gln Glu Asn Val Tyr Asn Ile Ile Glu
 420 425 430
 Glu Val Lys Lys Ile Cys Ser Val Leu Gly Cys Val Glu Thr Lys Gln
 435 440 445
 Ile Thr Asp Ala Val Asn Glu Leu Ser Leu Ile Leu Gln Arg Lys Gly
 450 455 460
 Glu Asn Phe Tyr Gln Ser Ser Glu Thr Ser Ala Lys Gly Leu Ile Glu
 465 470 475 480
 Lys Val Thr Thr Glu Leu Ser Thr Ser Ile Tyr Gln Leu Ile Asn Val
 485 490 495
 Tyr Cys Asn Ser Phe Tyr Ala Asp Phe Gln Pro Val Asn Val Pro Arg
 500 505 510
 Cys Thr Ser Tyr Leu Asn Pro Gly Leu Pro Ser His Leu Ser Phe Thr
 515 520 525
 Val Tyr Ala Ala His Asn Ile Pro Glu Thr Trp Val His Arg Ile Asn
 530 535 540

Phe Pro Leu Glu Ile Lys Ser Leu Pro Arg Glu Ser Met Leu Thr Val
 545 550 555 560
 Lys Leu Phe Gly Ile Ala Cys Ala Thr Asn Asn Ala Asn Leu Leu Ala
 565 570 575
 Trp Thr Cys Leu Pro Leu Phe Pro Lys Glu Lys Ser Ile Leu Gly Ser
 580 585 590
 Met Leu Phe Ser Met Thr Leu Gln Ser Glu Pro Pro Val Glu Met Ile
 595 600 605
 Thr Pro Gly Val Trp Asp Val Ser Gln Pro Ser Pro Val Thr Leu Gln
 610 615 620
 Ile Asp Phe Pro Ala Thr Gly Trp Glu Tyr Met Lys Pro Asp Ser Glu
 625 630 635 640
 Glu Asn Arg Ser Asn Leu Glu Glu Pro Leu Lys Glu Cys Ile Lys His
 645 650 655
 Ile Ala Arg Leu Ser Gln Lys Gln Thr Pro Leu Leu Leu Ser Glu Glu
 660 665 670
 Lys Lys Arg Tyr Leu Trp Phe Tyr Arg Phe Tyr Cys Asn Asn Glu Asn
 675 680 685
 Cys Ser Leu Pro Leu Val Leu Gly Ser Ala Pro Gly Trp Asp Glu Arg
 690 695 700
 Thr Val Ser Glu Met His Thr Ile Leu Arg Arg Trp Thr Phe Ser Gln
 705 710 715 720
 Pro Leu Glu Ala Leu Leu Leu Thr Ser Ser Phe Pro Asp Gln Glu
 725 730 735
 Ile Arg Lys Val Ala Val Gln Gln Leu Asp Asn Leu Leu Asn Asp Glu
 740 745 750
 Leu Leu Glu Tyr Leu Pro Gln Leu Val Gln Ala Val Lys Phe Glu Trp
 755 760 765
 Asn Leu Glu Ser Pro Leu Val Gln Leu Leu Leu His Arg Ser Leu Gln
 770 775 780
 Ser Ile Gln Val Ala His Arg Leu Tyr Trp Leu Leu Lys Asn Ala Glu
 785 790 795 800
 Asn Glu Ala Tyr Phe Lys Ser Trp Tyr Gln Lys Leu Leu Ala Ala Leu
 805 810 815
 Gln Phe Cys Ala Gly Lys Ala Leu Asn Asp Glu Phe Ser Lys Glu Gln
 820 825 830
 Lys Leu Ile Lys Ile Leu Gly Asp Ile Gly Glu Arg Val Lys Ser Ala
 835 840 845
 Ser Asp His Gln Arg Gln Glu Val Leu Lys Glu Ile Gly Arg Leu
 850 855 860
 Glu Glu Phe Phe Gln Asp Val Asn Thr Cys His Leu Pro Leu Asn Pro
 865 870 875 880
 Ala Leu Cys Ile Lys Gly Ile Asp His Asp Ala Cys Ser Tyr Phe Thr
 885 890 895
 Ser Asn Ala Leu Pro Leu Lys Ile Thr Phe Ile Asn Ala Asn Leu Met
 900 905 910
 Gly Lys Asn Ile Ser Ile Ile Phe Lys Ala Gly Asp Asp Leu Arg Gln
 915 920 925
 Asp Met Leu Val Leu Gln Leu Ile Gln Val Met Asp Asn Ile Trp Leu
 930 935 940
 Gln Glu Gly Leu Asp Met Gln Met Ile Ile Tyr Arg Cys Leu Ser Thr
 945 950 955 960
 Gly Lys Asp Gln Arg Leu Val Gln Met Val Pro Asp Ala Val Thr Leu
 965 970 975
 Ala Lys Ile His Arg His Ser Gly Leu Ile Gly Pro Leu Lys Glu Asn
 980 985 990
 Thr Ile Lys Lys Trp Phe Ser Gln His Asn His Leu Lys Ala Asp Tyr
 995 1000 1005
 Glu Lys Ala Leu Arg Asn Phe Phe Tyr Ser Cys Ala Gly Trp Cys Val
 1010 1015 1020
 Val Thr Phe Ile Leu Gly Val Cys Asp Arg His Asn Asp Asn Ile Met
 1025 1030 1035 1040
 Leu Thr Lys Ser Gly His Met Phe His Ile Asp Phe Gly Lys Phe Leu
 1045 1050 1055

Gly His Ala Gln Thr Phe Gly Gly Ile Lys Arg Asp Arg Ala Pro Phe
 1060 1065 1070
 Ile Phe Thr Ser Glu Met Glu Tyr Phe Ile Thr Glu Gly Gly Lys Asn
 1075 1080 1085
 Pro Gln His Phe Gln Asp Phe Val Glu Leu Cys Cys Arg Ala Tyr Asn
 1090 1095 1100
 Ile Ile Arg Lys His Ser Gln Leu Leu Leu Asn Leu Leu Glu Met Met
 1105 1110 1115 1120
 Leu Tyr Ala Gly Leu Pro Glu Leu Ser Gly Ile Gln Asp Leu Lys Tyr
 1125 1130 1135
 Val Tyr Asn Asn Leu Arg Pro Gln Asp Thr Asp Leu Glu Ala Thr Ser
 1140 1145 1150
 His Phe Thr Lys Lys Ile Lys Glu Ser Leu Glu Cys Phe Pro Val Lys
 1155 1160 1165
 Leu Asn Asn Leu Ile His Thr Leu Ala Gln Met Ser Ala Ile Ser Pro
 1170 1175 1180
 Ala Lys Ser Thr Ser Gln Thr Phe Pro Gln Glu Ser Cys Leu Leu Ser
 1185 1190 1195 1200
 Thr Thr Arg Ser Ile Glu Arg Ala Thr Ile Leu Gly Phe Ser Lys Lys
 1205 1210 1215
 Ser Ser Asn Leu Tyr Leu Ile Gln Val Thr His Ser Asn Asn Glu Thr
 1220 1225 1230
 Ser Leu Thr Glu Lys Ser Phe Glu Gln Phe Ser Lys Leu His Ser Gln
 1235 1240 1245
 Leu Gln Lys Gln Phe Ala Ser Leu Thr Leu Pro Glu Phe Pro His Trp
 1250 1255 1260
 Trp His Leu Pro Phe Thr Asn Ser Asp His Arg Arg Phe Arg Asp Leu
 1265 1270 1275 1280
 Asn His Tyr Met Glu Gln Ile Leu Asn Val Ser His Glu Val Thr Asn
 1285 1290 1295
 Ser Asp Cys Val Leu Ser Phe Leu Ser Glu Ala Gly Gln Gln Thr
 1300 1305 1310
 Val Glu Glu Ser Ser Pro Val Tyr Leu Gly Glu Lys Phe Pro Asp Lys
 1315 1320 1325
 Lys Pro Lys Val Gln Leu Val Ile Ser Tyr Glu Asp Val Lys Leu Thr
 1330 1335 1340
 Ile Leu Val Lys His Met Lys Asn Ile His Leu Pro Asp Gly Ser Ala
 1345 1350 1355 1360
 Pro Ser Ala His Val Glu Phe Tyr Leu Leu Pro Tyr Pro Ser Glu Val
 1365 1370 1375
 Arg Arg Arg Lys Thr Lys Ser Val Pro Lys Cys Thr Asp Pro Thr Tyr
 1380 1385 1390
 Asn Glu Ile Val Val Tyr Asp Glu Val Thr Glu Leu Gln Gly His Val
 1395 1400 1405
 Leu Met Leu Ile Val Lys Ser Lys Thr Val Phe Val Gly Ala Ile Asn
 1410 1415 1420
 Ile Arg Leu Cys Ser Val Pro Leu Asp Lys Glu Lys Trp Tyr Pro Leu
 1425 1430 1435 1440
 Gly Asn Ser Ile Ile Xaa Pro Leu Leu Leu Phe Tyr Thr Ser Asn Phe
 1445 1450 1455
 Met Gln Ser Val Leu His
 1460 1462

<210> 1098
<211> 111
<212> Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(111)
<223> X = any amino acid or stop code

<400> 1098
 Phe Phe Leu Arg Trp Ser Leu Asp Ser Val Thr Gln Ala Gly Val Gln
 1 5 10 15
 Ser His Asp Leu Ser Ser Leu Gln Pro Pro Pro Pro Gly Phe Lys Gln
 20 25 30
 Ser Ser Leu Phe Gly Leu Pro Ser Ser Trp Glu Xaa Arg Trp Val Pro
 35 40 45
 Pro Cys Pro Ala Asn Phe Phe Val Phe Leu Val Glu Thr Gly Phe Arg
 50 55 60
 His Val Gly Gln Ala Gly Leu Glu Leu Leu Thr Ser Asn Asp Leu Pro
 65 70 75 80
 Val Ser Ala Cys Gln Ser Ala Gly Ile Thr Gly Val Thr Thr Val Pro
 85 90 95
 Gln Arg Lys Ser Met Ile Leu Tyr Glu Val Thr Ile Cys Tyr Pro
 100 105 110 111

<210> 1099
<211> 1070
<212> Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1070)
<223> X = any amino acid or stop code

<400> 1099
 Phe Val Arg Glu Ile Arg Gly Pro Ala Val Pro Arg Leu Thr Ser Ala
 1 5 10 15
 Glu Asp Arg His Arg His Gly Pro His Ala His Ser Pro Glu Leu Gln
 20 25 30
 Arg Thr Gly Arg Asp Tyr Ser Leu Asp Tyr Leu Pro Phe Arg Leu Trp
 35 40 45
 Val Gly Ile Trp Val Ala Thr Phe Cys Leu Val Leu Val Ala Thr Glu
 50 55 60
 Ala Ser Val Leu Val Arg Tyr Phe Thr Arg Phe Thr Glu Glu Gly Phe
 65 70 75 80
 Cys Ala Leu Ile Ser Leu Ile Phe Ile Tyr Asp Ala Val Gly Lys Met
 85 90 95
 Leu Asn Leu Thr His Thr Tyr Pro Ile Gln Lys Pro Gly Ser Ser Ala
 100 105 110
 Tyr Gly Cys Leu Cys Gln Tyr Pro Gly Pro Gly Gly Asn Glu Ser Gln
 115 120 125
 Trp Ile Arg Thr Arg Pro Lys Asp Arg Asp Ile Val Ser Met Asp
 130 135 140
 Leu Gly Leu Ile Asn Ala Ser Leu Leu Pro Pro Glu Cys Thr Arg
 145 150 155 160
 Gln Gly Gly His Pro Arg Gly Pro Gly Cys His Thr Val Pro Asp Ile
 165 170 175
 Ala Phe Phe Ser Leu Leu Leu Phe Leu Thr Ser Phe Phe Phe Ala Met
 180 185 190
 Ala Leu Lys Cys Val Lys Thr Ser Arg Phe Phe Pro Ser Val Val Arg
 195 200 205
 Lys Gly Leu Ser Asp Phe Ser Ser Val Leu Ala Ile Leu Leu Gly Cys
 210 215 220

Gly Leu Asp Ala Phe Leu Gly Leu Ala Thr Pro Lys Leu Met Val Pro
 225 230 235 240
 Arg Glu Phe Lys Pro Thr Leu Pro Gly Arg Gly Trp Leu Val Ser Pro
 245 250 255
 Phe Gly Ala Asn Pro Trp Trp Trp Ser Val Ala Ala Ala Leu Pro Ala
 260 265 270
 Leu Leu Leu Ser Ile Leu Ile Phe Met Asp Gln Gln Ile Thr Ala Val
 275 280 285
 Ile Leu Asn Arg Met Glu Tyr Arg Leu Gln Lys Gly Ala Gly Phe His
 290 295 300
 Leu Asp Leu Phe Trp Val Ala Val Leu Met Leu Leu Thr Ser Ala Leu
 305 310 315 320
 Gly Leu Pro Trp Tyr Val Ser Ala Thr Val Ile Ser Leu Ala His Met
 325 330 335
 Asp Ser Leu Arg Arg Glu Ser Arg Ala Cys Ala Pro Gly Glu Arg Pro
 340 345 350
 Asn Phe Leu Gly Ile Arg Glu Gln Arg Leu Thr Gly Leu Val Val Phe
 355 360 365
 Ile Leu Thr Gly Ala Ser Ile Phe Leu Ala Pro Val Leu Lys Phe Ile
 370 375 380
 Pro Met Pro Val Leu Tyr Gly Ile Phe Leu Tyr Met Gly Val Ala Ala
 385 390 395 400
 Leu Ser Ser Ile Gln Phe Thr Asn Arg Val Lys Leu Leu Leu Met Pro
 405 410 415
 Ala Lys His Gln Pro Asp Leu Leu Leu Arg His Val Pro Leu Thr
 420 425 430
 Arg Val His Leu Phe Thr Ala Ile Ser Phe Ala Cys Leu Gly Leu Leu
 435 440 445
 Trp Ile Ile Lys Ser Thr Pro Ala Ala Ile Ile Phe Pro Leu Met Leu
 450 455 460
 Leu Gly Leu Val Gly Val Arg Lys Ala Leu Glu Arg Val Phe Ser Pro
 465 470 475 480
 Gln Glu Leu Leu Trp Leu Asp Glu Leu Met Pro Glu Glu Glu Arg Ser
 485 490 495
 Ile Pro Glu Lys Gly Leu Glu Pro Glu His Ser Phe Ser Gly Ser Asp
 500 505 510
 Ser Glu Asp Ser Glu Leu Met Tyr Gln Pro Lys Ala Pro Glu Ile Asn
 515 520 525
 Ile Ser Val Asn Xaa Leu Glu Xaa Glu Phe Val Arg Glu Ile Arg Gly
 530 535 540
 Pro Ala Val Pro Arg Leu Thr Ser Ala Glu Asp Arg His Arg His Gly
 545 550 555 560
 Pro His Ala His Ser Pro Glu Leu Gln Arg Thr Gly Arg Asp Tyr Ser
 565 570 575
 Leu Asp Tyr Leu Pro Phe Arg Leu Trp Val Gly Ile Trp Val Ala Thr
 580 585 590
 Phe Cys Leu Val Leu Val Ala Thr Glu Ala Ser Val Leu Val Arg Tyr
 595 600 605
 Phe Thr Arg Phe Thr Glu Glu Phe Cys Ala Leu Ile Ser Leu Ile
 610 615 620
 Phe Ile Tyr Asp Ala Val Gly Lys Met Leu Asn Leu Thr His Thr Tyr
 625 630 635 640
 Pro Ile Gln Lys Pro Gly Ser Ser Ala Tyr Gly Cys Leu Cys Gln Tyr
 645 650 655
 Pro Gly Pro Gly Gly Asn Glu Ser Gln Trp Ile Arg Thr Arg Pro Lys
 660 665 670
 Asp Arg Asp Asp Ile Val Ser Met Asp Leu Gly Leu Ile Asn Ala Ser
 675 680 685
 Leu Leu Pro Pro Pro Glu Cys Thr Arg Gln Gly Gly His Pro Arg Gly
 690 695 700
 Pro Gly Cys His Thr Val Pro Asp Ile Ala Phe Phe Ser Leu Leu Leu
 705 710 715 720
 Phe Leu Thr Ser Phe Phe Phe Ala Met Ala Leu Lys Cys Val Lys Thr
 725 730 735

Ser Arg Phe Pro Ser Val Val Arg Lys Gly Leu Ser Asp Phe Ser
 740 745 750
 Ser Val Leu Ala Ile Leu Leu Gly Cys Gly Leu Asp Ala Phe Leu Gly
 755 760 765
 Leu Ala Thr Pro Lys Leu Met Val Pro Arg Glu Phe Lys Pro Thr Leu
 770 775 780
 Pro Gly Arg Gly Trp Leu Val Ser Pro Phe Gly Ala Asn Pro Trp Trp
 785 790 795 800
 Trp Ser Val Ala Ala Leu Pro Ala Leu Leu Ser Ile Leu Ile
 805 810 815
 Phe Met Asp Gln Ile Thr Ala Val Ile Leu Asn Arg Met Glu Tyr
 820 825 830
 Arg Leu Gln Lys Gly Ala Gly Phe His Leu Asp Leu Phe Cys Val Ala
 835 840 845
 Val Leu Met Leu Leu Thr Ser Ala Leu Gly Leu Pro Trp Tyr Val Ser
 850 855 860
 Ala Thr Val Ile Ser Leu Ala His Met Asp Ser Leu Arg Arg Glu Ser
 865 870 875 880
 Arg Ala Cys Ala Pro Gly Glu Arg Pro Asn Phe Leu Gly Ile Arg Glu
 885 890 895
 Gln Arg Leu Thr Gly Leu Val Val Phe Ile Leu Thr Gly Ala Ser Ile
 900 905 910
 Phe Leu Ala Pro Val Leu Lys Phe Ile Pro Met Pro Val Leu Tyr Gly
 915 920 925
 Ile Phe Leu Tyr Met Gly Val Ala Ala Leu Ser Ser Ile Gln Phe Thr
 930 935 940
 Asn Arg Val Lys Leu Leu Leu Asp Ala Ser Lys Thr Pro Ala Arg Pro
 945 950 955 960
 Ala Thr Leu Ala Ala Cys Ala Ser Asp Gln Gly Pro Pro Leu His Ser
 965 970 975
 His Gln Leu Cys Pro Val Trp Gly Cys Phe Gly Ile Ile Lys Ser Thr
 980 985 990
 Pro Ala Ala Ile Ile Phe Pro Leu Met Leu Leu Gly Leu Val Gly Val
 995 1000 1005
 Arg Lys Ala Leu Glu Arg Val Phe Ser Pro Gln Glu Leu Leu Trp Leu
 1010 1015 1020
 Asp Glu Leu Met Pro Glu Glu Arg Ser Ile Pro Glu Lys Gly Leu
 1025 1030 1035 1040
 Glu Pro Glu His Ser Phe Ser Gly Ser Asp Ser Glu Asp Ser Glu Leu
 1045 1050 1055
 Met Tyr Gln Pro Lys Ala Pro Glu Ile Asn Ile Ser Val Asn
 1060 1065 1070

<210> 1100
 <211> 875
 <212> Amino acid
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(875)
 <223> X = any amino acid or stop code

<400> 1100
 Met Gly Leu Lys Ala Arg Arg Ala Ala Gly Ala Ala Gly Gly Gly
 1 5 10 15
 Asp Gly Gly Gly Gly Gly Gly Ala Ala Asn Pro Ala Gly Gly Asp
 20 25 30
 Ala Ala Ala Ala Gly Asp Glu Glu Arg Lys Val Gly Leu Ala Pro Gly

| | | | | |
|---|-----|-----|-----|-----|
| Asp Val Glu Gln Val Val | 35 | 40 | 45 | |
| Thr Leu Ala Leu Gly Ala Gly Ala Asp Lys Asp | | | | |
| 50 | 55 | 60 | | |
| Gly Thr Leu Leu Leu Glu Gly Gly Arg Asp Glu Gly Gln Arg Arg | 65 | 70 | 75 | 80 |
| Thr Pro Gln Gly Ile Gly Leu Leu Ala Lys Thr Pro Leu Ser Arg Pro | | | | |
| 85 | 90 | 95 | | |
| Val Lys Arg Asn Asn Ala Lys Tyr Arg Arg Ile Gln Thr Leu Ile Tyr | 100 | 105 | 110 | |
| 115 | 120 | 125 | | |
| Asp Ala Leu Glu Arg Pro Arg Gly Trp Ala Leu Leu Tyr His Ala Leu | | | | |
| 130 | 135 | 140 | | |
| Phe Leu Ile Val Leu Gly Cys Leu Ile Leu Ala Val Leu Thr Thr | 145 | 150 | 155 | 160 |
| 165 | 170 | 175 | | |
| Ala Ala Gly Cys Cys Arg Tyr Lys Gly Trp Arg Gly Arg Leu Lys | | | | |
| 180 | 185 | 190 | | |
| Phe Ala Arg Lys Pro Leu Cys Met Leu Asp Ile Phe Val Leu Ile Ala | 195 | 200 | 205 | |
| 210 | 215 | 220 | | |
| Ser Val Pro Val Val Ala Val Gly Asn Gln Gly Asn Val Leu Ala Thr | | | | |
| 225 | 230 | 235 | 240 | |
| Gly Pro Gly Glu Gly Gly Thr Trp Lys Leu Leu Gly Ser Ala Ile Cys | 245 | 250 | 255 | |
| Ala His Ser Lys Glu Leu Ile Thr Ala Trp Tyr Ile Gly Phe Leu Thr | 260 | 265 | 270 | |
| Leu Ile Leu Ser Ser Phe Leu Val Tyr Leu Val Glu Lys Asp Val Pro | 275 | 280 | 285 | |
| 290 | 295 | 300 | | |
| Glu Val Asp Ala Gln Gly Glu Glu Met Lys Glu Glu Phe Glu Thr Tyr | | | | |
| 305 | 310 | 315 | 320 | |
| Gly Asp Lys Thr Pro Lys Thr Trp Glu Gly Arg Leu Ile Ala Ala Thr | 325 | 330 | 335 | |
| Phe Ser Leu Ile Gly Val Ser Phe Phe Ala Leu Pro Ala Gly Ile Leu | | | | |
| 340 | 345 | 350 | | |
| Gly Ser Gly Leu Ala Leu Lys Val Gln Glu Gln His Arg Gln Lys His | 355 | 360 | 365 | |
| Phe Glu Lys Arg Arg Lys Pro Ala Ala Glu Leu Ile Gln Ala Ala Trp | 370 | 375 | 380 | |
| 385 | 390 | 395 | 400 | |
| Arg Phe Tyr Glu Ser Val Val Ser Phe Pro Phe Phe Arg Lys Glu Gln | 405 | 410 | 415 | |
| Leu Glu Ala Ala Ser Ser Gln Lys Leu Gly Leu Leu Asp Arg Val Arg | 420 | 425 | 430 | |
| 435 | 440 | 445 | | |
| Leu Asn Val Asp Ala Ile Glu Glu Ser Pro Ser Lys Glu Pro Lys Pro | | | | |
| 450 | 455 | 460 | | |
| Val Gly Leu Asn Asn Lys Glu Arg Phe Arg Thr Ala Phe Arg Met Lys | 465 | 470 | 475 | 480 |
| Ala Tyr Ala Phe Trp Gln Ser Ser Glu Asp Ala Gly Thr Gly Asp Pro | 485 | 490 | 495 | |
| Met Ala Glu Asp Arg Gly Tyr Gly Asn Asp Phe Pro Ile Glu Asp Met | 500 | 505 | 510 | |
| Ile Pro Thr Leu Lys Ala Ala Ile Arg Ala Val Arg Ile Leu Gln Phe | 515 | 520 | 525 | |
| Arg Leu Tyr Lys Lys Lys Phe Lys Glu Thr Leu Arg Pro Tyr Asp Val | 530 | 535 | 540 | |
| Lys Asp Val Ile Glu Gln Tyr Ser Ala Gly His Leu Asp Met Leu Ser | | | | |

| | | | |
|---|-----|-----|-----|
| 545 | 550 | 555 | 560 |
| Arg Ile Lys Tyr Leu Gln Thr Arg Ile Asp Met Ile Phe Thr Pro Gly | 565 | 570 | 575 |
| Pro Pro Ser Thr Pro Lys His Lys Lys Ser Gln Lys Gly Ser Ala Phe | 580 | 585 | 590 |
| Thr Phe Pro Ser Gln Gln Ser Pro Arg Asn Glu Pro Tyr Val Ala Arg | 595 | 600 | 605 |
| Pro Ser Thr Ser Glu Ile Glu Asp Gln Arg His Xaa Trp Gly Lys Phe | 610 | 615 | 620 |
| Val Lys Ser Leu Lys Gly Lys Val Gln Gly Leu Gly Arg Lys Leu Asp | 625 | 630 | 635 |
| Phe Leu Val Asp Met His Met Gln His Met Glu Arg Leu Gln Val Gln | 640 | 645 | 650 |
| Val Thr Glu Tyr Tyr Pro Thr Lys Gly Thr Ser Ser Pro Ala Glu Ala | 655 | 660 | 665 |
| Glu Lys Lys Glu Asp Asn Arg Tyr Ser Asp Leu Lys Thr Ile Ile Cys | 670 | 675 | 680 |
| Asn Tyr Ser Glu Thr Gly Pro Pro Glu Pro Pro Tyr Ser Phe His Gln | 685 | 690 | 695 |
| Val Thr Ile Asp Lys Val Ser Pro Tyr Gly Phe Phe Ala His Asp Pro | 700 | 705 | 710 |
| Val Asn Leu Pro Arg Gly Gly Pro Ser Ser Gly Lys Val Gln Ala Thr | 715 | 720 | 725 |
| Pro Pro Ser Ser Ala Thr Thr Tyr Val Glu Arg Pro Thr Val Leu Pro | 730 | 735 | 740 |
| Ile Leu Thr Leu Leu Asp Ser Arg Val Ser Cys His Ser Gln Ala Asp | 745 | 750 | 755 |
| Leu Gln Gly Pro Tyr Ser Asp Arg Ile Ser Pro Arg Gln Arg Arg Ser | 760 | 765 | 770 |
| Ile Thr Arg Asp Ser Asp Thr Pro Leu Ser Leu Met Ser Val Asn His | 775 | 780 | 785 |
| Glu Glu Leu Glu Arg Ser Pro Ser Gly Phe Ser Ile Ser Gln Asp Arg | 795 | 800 | 805 |
| Asp Asp Tyr Val Phe Gly Pro Asn Gly Gly Ser Ser Trp Met Arg Glu | 810 | 815 | 820 |
| Lys Arg Tyr Leu Ala Glu Gly Glu Thr Asp Thr Asp Thr Asp Pro Phe | 825 | 830 | 835 |
| Thr Pro Ser Gly Ser Met Pro Leu Ser Ser Thr Gly Asp Gly Ile Ser | 845 | 850 | 855 |
| Asp Ser Val Trp Thr Pro Ser Asn Lys Pro Ile | 860 | 865 | 870 |
| | | | 875 |

<210> 1101
 <211> 3530
 <212> Amino acid
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> {1}...(3530)
 <223> X = any amino acid or stop code

| |
|---|
| <400> 1101 |
| Arg Thr Arg Gly Ile Ile Glu Phe Asp Pro Lys Tyr Thr Ala Phe Glu |
| 1 5 10 15 |
| Val Glu Glu Asp Val Gly Leu Ile Met Ile Pro Val Val Arg Leu His |
| 20 25 30 |
| Gly Thr Tyr Gly Tyr Val Thr Ala Asp Phe Ile Ser Gln Ser Ser Ser |
| 35 40 45 |

Ala Ser Pro Gly Gly Val Asp Tyr Ile Leu His Gly Ser Thr Val Thr
 50 55 60
 Phe Gln His Gly Gln Asn Leu Ser Phe Ile Asn Ile Ser Ile Ile Asp
 65 70 75 80
 Asp Asn Glu Ser Glu Phe Glu Glu Pro Ile Glu Ile Leu Leu Thr Gly
 85 90 95
 Ala Thr Gly Gly Ala Val Leu Gly Arg His Leu Val Ser Arg Ile Ile
 100 105 110
 Ile Ala Lys Ser Asp Ser Pro Phe Gly Val Ile Arg Phe Leu Asn Gln
 115 120 125
 Ser Lys Ile Ser Ile Ala Asn Pro Asn Ser Thr Met Ile Leu Ser Leu
 130 135 140
 Val Leu Glu Arg Thr Gly Gly Leu Leu Gly Glu Ile Gln Val Asn Trp
 145 150 155 160
 Glu Thr Val Gly Pro Asn Ser Gln Glu Ala Leu Leu Pro Gln Asn Arg
 165 170 175
 Asp Ile Ala Asp Pro Val Ser Gly Leu Phe Tyr Phe Gly Glu Gly Glu
 180 185 190
 Gly Gly Val Arg Thr Ile Ile Leu Thr Ile Tyr Pro His Glu Glu Ile
 195 200 205
 Glu Val Glu Glu Thr Phe Ile Ile Lys Leu His Leu Val Lys Gly Glu
 210 215 220
 Ala Lys Leu Asp Ser Arg Ala Lys Asp Val Thr Leu Thr Ile Gln Glu
 225 230 235 240
 Phe Gly Asp Pro Asn Gly Val Val Gln Phe Ala Pro Glu Thr Leu Ser
 245 250 255
 Lys Lys Thr Tyr Ser Glu Pro Leu Ala Leu Glu Gly Pro Leu Leu Ile
 260 265 270
 Thr Phe Phe Val Arg Arg Val Lys Gly Thr Phe Gly Glu Ile Met Val
 275 280 285
 Tyr Trp Glu Leu Ser Ser Glu Phe Asp Ile Thr Glu Asp Phe Leu Ser
 290 295 300
 Thr Ser Gly Phe Phe Thr Ile Ala Asp Gly Glu Ser Glu Ala Ser Phe
 305 310 315 320
 Asp Val His Leu Leu Pro Asp Glu Val Pro Glu Ile Glu Glu Asp Tyr
 325 330 335
 Val Ile Gln Leu Val Ser Val Glu Gly Ala Glu Leu Asp Leu Glu
 340 345 350
 Lys Ser Ile Thr Trp Phe Ser Val Tyr Ala Asn Asp Asp Pro His Gly
 355 360 365
 Val Phe Ala Leu Tyr Ser Asp Arg Gln Ser Ile Leu Ile Gly Gln Asn
 370 375 380
 Leu Ile Arg Ser Ile Gln Ile Asn Ile Thr Arg Leu Ala Gly Thr Phe
 385 390 395 400
 Gly Asp Val Ala Val Gly Leu Arg Ile Ser Ser Asp His Lys Glu Gln
 405 410 415
 Pro Ile Val Thr Glu Asn Ala Glu Arg Gln Leu Val Val Lys Asp Gly
 420 425 430
 Ala Thr Lys Val Asp Val Val Pro Ile Lys Asn Gln Val Phe Leu
 435 440 445
 Ser Leu Gly Ser Asn Phe Thr Leu Gln Leu Val Thr Val Met Leu Val
 450 455 460
 Gly Gly Arg Phe Tyr Gly Met Pro Thr Ile Leu Gln Glu Ala Lys Ser
 465 470 475 480
 Ala Val Leu Pro Val Ser Glu Lys Ala Ala Asn Ser Gln Val Gly Phe
 485 490 495
 Glu Ser Thr Ala Phe Gln Leu Met Asn Ile Thr Ala Gly Thr Ser His
 500 505 510
 Val Met Ile Ser Arg Arg Gly Thr Tyr Gly Ala Leu Ser Val Ala Trp
 515 520 525
 Thr Thr Gly Tyr Ala Pro Gly Leu Glu Ile Pro Glu Phe Ile Val Val
 530 535 540
 Gly Asn Met Thr Pro Thr Leu Gly Ser Leu Ser Phe Ser His Gly Glu
 545 550 555 560

Gln Arg Lys Gly Val Phe Leu Trp Thr Phe Pro Ser Pro Gly Trp Pro
 565 570 575
 Glu Ala Phe Val Leu His Leu Ser Gly Val Gln Ser Ser Ala Pro Gly
 580 585 590
 Gly Ala Gln Leu Arg Ser Gly Phe Ile Val Ala Glu Ile Glu Pro Met
 595 600 605
 Gly Val Phe Gln Phe Ser Thr Ser Ser Arg Asn Ile Ile Val Ser Glu
 610 615 620
 Asp Thr Gln Met Ile Arg Leu His Val Gln Arg Leu Phe Gly Phe His
 625 630 635 640
 Ser Asp Leu Ile Lys Val Ser Tyr Gln Thr Thr Ala Gly Ser Ala Lys
 645 650 655
 Pro Leu Glu Asp Phe Glu Pro Val Gln Asn Gly Glu Leu Phe Phe Gln
 660 665 670
 Lys Phe Gln Thr Glu Val Asp Phe Glu Ile Thr Ile Ile Asn Asp Gln
 675 680 685
 Leu Ser Glu Ile Glu Glu Phe Phe Tyr Ile Asn Leu Thr Ser Val Glu
 690 695 700
 Ile Arg Gly Leu Gln Lys Phe Asp Val Asn Trp Ser Pro Arg Leu Asn
 705 710 715 720
 Leu Asp Phe Ser Val Ala Val Ile Thr Ile Leu Asp Asn Asp Asp Leu
 725 730 735
 Ala Gly Met Asp Ile Ser Phe Pro Glu Thr Thr Val Ala Val Ala Val
 740 745 750
 Asp Thr Thr Leu Ile Pro Val Glu Thr Glu Ser Thr Thr Tyr Leu Ser
 755 760 765
 Thr Ser Lys Thr Thr Ile Leu Gln Pro Thr Asn Val Val Ala Ile
 770 775 780
 Val Thr Glu Ala Thr Gly Val Ser Ala Ile Pro Glu Lys Leu Val Thr
 785 790 795 800
 Leu His Gly Thr Pro Ala Val Ser Glu Lys Pro Asp Val Ala Thr Val
 805 810 815
 Thr Ala Asn Val Ser Ile His Gly Thr Phe Ser Leu Gly Pro Ser Ile
 820 825 830
 Val Tyr Ile Glu Glu Glu Met Lys Asn Gly Thr Phe Asn Thr Ala Glu
 835 840 845
 Val Leu Ile Arg Arg Thr Gly Gly Phe Thr Gly Asn Val Ser Ile Thr
 850 855 860
 Val Lys Thr Phe Gly Glu Arg Cys Ala Gln Met Glu Pro Asn Ala Leu
 865 870 875 880
 Pro Phe Arg Gly Ile Tyr Gly Ile Ser Asn Leu Thr Trp Ala Val Glu
 885 890 895
 Glu Glu Asp Phe Glu Glu Gln Thr Leu Thr Leu Ile Phe Leu Asp Gly
 900 905 910
 Glu Arg Glu Arg Lys Val Ser Val Gln Ile Leu Asp Asp Glu Pro
 915 920 925
 Glu Gly Gln Glu Phe Phe Tyr Val Phe Leu Thr Asn Pro Gln Gly Gly
 930 935 940
 Ala Gln Ile Val Glu Gly Lys Asp Asp Thr Gly Phe Ala Ala Phe Ala
 945 950 955 960
 Met Val Ile Ile Thr Gly Ser Asp Leu His Asn Gly Ile Ile Gly Phe
 965 970 975
 Ser Glu Glu Ser Gln Ser Gly Leu Glu Leu Arg Glu Gly Ala Val Met
 980 985 990
 Arg Arg Leu His Leu Ile Val Thr Arg Gln Pro Asn Arg Ala Phe Glu
 995 1000 1005
 Asp Val Lys Val Phe Trp Arg Val Thr Leu Asn Lys Thr Val Val Val
 1010 1015 1020
 Leu Gln Lys Asp Gly Val Asn Leu Met Glu Glu Leu Gln Ser Val Ser
 1025 1030 1035 1040
 Gly Thr Thr Thr Cys Thr Met Gly Gln Thr Lys Cys Phe Ile Ser Ile
 1045 1050 1055
 Glu Leu Lys Pro Glu Lys Val Pro Gln Val Glu Val Tyr Phe Phe Val
 1060 1065 1070

Glu Leu Tyr Glu Ala Thr Ala Gly Ala Ala Ile Asn Asn Ser Ala Arg
 1075 1080 1085
 Phe Ala Gln Ile Lys Ile Leu Glu Ser Asp Glu Ser Gln Ser Leu Val
 1090 1095 1100
 Tyr Phe Ser Val Gly Ser Arg Leu Ala Val Ala His Lys Lys Ala Thr
 1105 1110 1115 1120
 Leu Ile Ser Leu Gln Val Ala Arg Asp Ser Gly Thr Gly Leu Met Met
 1125 1130 1135
 Ser Val Asn Phe Ser Thr Gln Glu Leu Arg Ser Ala Glu Thr Ile Gly
 1140 1145 1150
 Arg Thr Ile Ile Ser Pro Ala Ile Ser Gly Lys Asp Phe Val Ile Thr
 1155 1160 1165
 Glu Gly Thr Leu Val Phe Glu Pro Gly Gln Arg Ser Thr Val Leu Asp
 1170 1175 1180
 Val Ile Leu Thr Pro Glu Thr Gly Ser Leu Asn Ser Phe Pro Lys Arg
 1185 1190 1195 1200
 Phe Gln Ile Val Leu Phe Asp Pro Lys Gly Gly Ala Arg Ile Asp Lys
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 Val Tyr Gly Thr Ala Asn Ile Thr Leu Val Ser Asp Ala Asp Ser Gln
 1220 1225 1230
 Ala Ile Trp Gly Leu Ala Asp Gln Leu His Gln Pro Val Asn Asp Asp
 1235 1240 1245
 Ile Leu Asn Arg Val Leu His Thr Ile Ser Met Lys Val Ala Thr Glu
 1250 1255 1260
 Asn Thr Asp Glu Gln Leu Ser Ala Met Met His Leu Ile Glu Lys Ile
 1265 1270 1275 1280
 Thr Thr Glu Gly Lys Ile Gln Ala Phe Ser Val Ala Ser Arg Thr Leu
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 Phe Tyr Glu Ile Leu Cys Ser Leu Ile Asn Pro Lys Arg Lys Asp Thr
 1300 1305 1310
 Arg Gly Phe Ser His Phe Ala Glu Leu Thr Glu Asn Phe Ala Phe Ser
 1315 1320 1325
 Leu Leu Thr Asn Val Thr Cys Gly Ser Pro Gly Glu Lys Ser Lys Thr
 1330 1335 1340
 Ile Leu Asp Ser Cys Pro Tyr Leu Ser Ile Leu Ala Leu His Trp Tyr
 1345 1350 1355 1360
 Pro Gln Gln Ile Asn Gly His Lys Phe Glu Gly Lys Glu Gly Asp Tyr
 1365 1370 1375
 Ile Arg Ile Pro Glu Arg Leu Leu Asp Val Gln Asp Ala Glu Ile Met
 1380 1385 1390
 Ala Gly Lys Ser Thr Cys Lys Leu Val Gln Phe Thr Glu Tyr Ser Ser
 1395 1400 1405
 Gln Gln Trp Phe Ile Ser Gly Asn Asn Leu Pro Thr Leu Lys Asn Lys
 1410 1415 1420
 Val Leu Ser Leu Ser Val Lys Gly Gln Ser Ser Gln Leu Leu Thr Asn
 1425 1430 1435 1440
 Asp Asn Glu Val Leu Tyr Arg Ile Tyr Ala Ala Glu Pro Arg Ile Ile
 1445 1450 1455
 Pro Gln Thr Ser Leu Cys Leu Leu Trp Asn Gln Ala Ala Ser Trp
 1460 1465 1470
 Leu Ser Asp Ser Gln Phe Cys Lys Val Ile Glu Glu Thr Ala Asp Tyr
 1475 1480 1485
 Val Glu Cys Ala Cys Leu His Met Ser Val Tyr Ala Val Tyr Ala Arg
 1490 1495 1500
 Thr Asp Asn Leu Ser Ser Tyr Asn Glu Ala Phe Phe Thr Ser Gly Phe
 1505 1510 1515 1520
 Ile Cys Ile Ser Gly Leu Cys Leu Ala Val Leu Ser His Ile Phe Cys
 1525 1530 1535
 Ala Arg Tyr Ser Met Phe Ala Ala Lys Leu Leu Thr His Met Met Ala
 1540 1545 1550
 Ala Ser Leu Gly Thr Gln Ile Leu Phe Leu Ala Ser Ala Tyr Ala Ser
 1555 1560 1565
 Pro Gln Leu Ala Glu Glu Ser Cys Ser Ala Met Ala Ala Val Thr His
 1570 1575 1580

Tyr Leu Tyr Leu Cys Gln Phe Ser Trp Met Leu Ile Gln Ser Val Asn
 1585 1590 1595 1600
 Phe Trp Tyr Val Leu Val Met Asn Asp Glu His Thr Glu Arg Arg Tyr
 1605 1610 1615
 Leu Leu Phe Leu Leu Ser Trp Gly Leu Pro Ala Phe Val Val Ile
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 Leu Leu Ile Val Ile Leu Lys Gly Ile Tyr His Gln Ser Met Ser Gln
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 Ile Tyr Gly Leu Ile His Gly Asp Leu Cys Phe Ile Pro Asn Val Tyr
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 1665 1670 1675 1680
 Val Phe Val Val Phe Ile His Ala Tyr Gln Val Lys Pro Gln Trp Lys
 1685 1690 1695
 Ala Tyr Asp Asp Val Phe Arg Gly Arg Thr Asn Ala Ala Glu Ile Pro
 1700 1705 1710
 Leu Ile Leu Tyr Leu Phe Ala Leu Ile Ser Val Thr Trp Leu Trp Gly
 1715 1720 1725
 Gly Leu His Met Ala Tyr Arg His Phe Trp Met Leu Val Leu Phe Val
 1730 1735 1740
 Ile Phe Asn Ser Leu Gln Leu Leu Tyr Pro Leu Phe Tyr Phe Leu Leu
 1745 1750 1755 1760
 Leu Xaa Asp Gln Ser Ser Ala Ser Pro Gly Gly Val Asp Tyr Ile
 1765 1770 1775
 Leu His Gly Ser Thr Val Thr Phe Gln His Gly Gln Asn Leu Ser Phe
 1780 1785 1790
 Ile Asn Ile Ser Ile Ile Asp Asp Asn Glu Ser Glu Phe Glu Glu Pro
 1795 1800 1805
 Ile Glu Ile Leu Leu Thr Gly Ala Thr Gly Gly Ala Val Leu Gly Arg
 1810 1815 1820
 His Leu Val Ser Arg Ile Ile Ile Ala Lys Ser Asp Ser Pro Phe Gly
 1825 1830 1835 1840
 Val Ile Arg Phe Leu Asn Gln Ser Lys Ile Ser Ile Ala Asn Pro Asn
 1845 1850 1855
 Ser Thr Met Ile Leu Ser Leu Val Leu Glu Arg Thr Gly Gly Leu Leu
 1860 1865 1870
 Gly Glu Ile Gln Val Asn Trp Glu Thr Val Gly Pro Asn Ser Gln Glu
 1875 1880 1885
 Ala Leu Leu Pro Gln Asn Arg Asp Ile Ala Asp Pro Val Ser Gln Glu
 1890 1895 1900
 Phe Tyr Phe Gly Glu Gly Glu Gly Val Arg Thr Ile Ile Leu Thr
 1905 1910 1915 1920
 Ile Tyr Pro His Glu Glu Ile Glu Val Glu Glu Thr Phe Ile Ile Lys
 1925 1930 1935
 Leu His Leu Val Lys Gly Glu Ala Lys Leu Asp Ser Arg Ala Lys Asp
 1940 1945 1950
 Val Thr Leu Thr Ile Gln Glu Phe Gly Asp Pro Asn Gly Val Val Gln
 1955 1960 1965
 Phe Ala Pro Glu Thr Leu Ser Lys Lys Thr Tyr Ser Glu Pro Leu Ala
 1970 1975 1980
 Leu Glu Gly Pro Leu Leu Ile Thr Phe Phe Val Arg Arg Val Lys Gly
 1985 1990 1995 2000
 Thr Phe Gly Glu Ile Met Val Tyr Trp Glu Leu Ser Ser Glu Phe Asp
 2005 2010 2015
 Ile Thr Glu Asp Phe Leu Ser Thr Ser Gly Phe Phe Thr Ile Ala Asp
 2020 2025 2030
 Gly Glu Ser Glu Ala Ser Phe Asp Val His Leu Leu Pro Asp Glu Val
 2035 2040 2045
 Pro Glu Ile Glu Glu Asp Tyr Val Ile Gln Leu Val Ser Val Glu Gly
 2050 2055 2060
 Gly Ala Glu Leu Asp Leu Glu Lys Ser Ile Thr Trp Phe Ser Val Tyr
 2065 2070 2075 2080
 Ala Asn Asp Asp Pro His Gly Val Phe Ala Leu Tyr Ser Asp Arg Gln
 2085 2090 2095

Ser Ile Leu Ile Gly Gln Asn Leu Ile Arg Ser Ile Gln Ile Asn Ile
 2100 2105 2110
 Thr Arg Leu Ala Gly Thr Phe Gly Asp Val Ala Val Gly Leu Arg Ile
 2115 2120 2125
 Ser Ser Asp His Lys Glu Gln Pro Ile Val Thr Glu Asn Ala Glu Arg
 2130 2135 2140
 Gln Leu Val Val Lys Asp Gly Ala Thr Tyr Lys Val Asp Val Val Pro
 2145 2150 2155 2160
 Ile Lys Asn Gln Val Phe Leu Ser Leu Gly Ser Asn Phe Thr Leu Gln
 2165 2170 2175
 Leu Val Thr Val Met Leu Val Gly Gly Arg Phe Tyr Gly Met Pro Thr
 2180 2185 2190
 Ile Leu Gln Glu Ala Lys Ser Ala Val Leu Pro Val Ser Glu Lys Ala
 2195 2200 2205
 Ala Asn Ser Gln Val Gly Phe Glu Ser Thr Ala Phe Gln Leu Met Asn
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 2225 2230 2235 2240
 Gly Ala Leu Ser Val Ala Trp Thr Thr Gly Tyr Ala Pro Gly Leu Glu
 2245 2250 2255
 Ile Pro Glu Phe Ile Val Val Gly Asn Met Thr Pro Thr Leu Gly Ser
 2260 2265 2270
 Leu Ser Phe Ser His Gly Glu Gln Arg Lys Gly Val Phe Leu Trp Thr
 2275 2280 2285
 Phe Pro Ser Pro Gly Trp Pro Glu Ala Phe Val Leu His Leu Ser Gly
 2290 2295 2300
 Val Gln Ser Ser Ala Pro Gly Gly Ala Gln Leu Arg Ser Gly Phe Ile
 2305 2310 2315 2320
 Val Ala Glu Ile Glu Pro Met Gly Val Phe Gln Phe Ser Thr Ser Ser
 2325 2330 2335
 Arg Asn Ile Ile Val Ser Glu Asp Thr Gln Met Ile Arg Leu His Val
 2340 2345 2350
 Gln Arg Leu Phe Gly Phe His Ser Asp Leu Ile Lys Val Ser Tyr Gln
 2355 2360 2365
 Thr Thr Ala Gly Ser Ala Lys Pro Leu Glu Asp Phe Glu Pro Val Gln
 2370 2375 2380
 Asn Gly Glu Leu Phe Phe Gln Lys Phe Gln Thr Glu Val Asp Phe Glu
 2385 2390 2395 2400
 Ile Thr Ile Ile Asn Asp Gln Leu Ser Glu Ile Glu Glu Phe Phe Tyr
 2405 2410 2415
 Ile Asn Leu Thr Ser Val Glu Ile Arg Gly Leu Gln Lys Phe Asp Val
 2420 2425 2430
 Asn Trp Ser Pro Arg Leu Asn Leu Asp Phe Ser Val Ala Val Ile Thr
 2435 2440 2445
 Ile Leu Asp Asp Asp Asp Leu Ala Gly Met Asp Ile Ser Phe Pro Glu
 2450 2455 2460
 Thr Thr Val Ala Val Ala Val Asp Thr Thr Leu Ile Pro Val Glu Thr
 2465 2470 2475 2480
 Glu Ser Thr Thr Tyr Leu Ser Thr Ser Lys Thr Thr Thr Ile Leu Gln
 2485 2490 2495
 Pro Thr Asn Val Val Ala Ile Val Thr Glu Ala Thr Gly Val Ser Ala
 2500 2505 2510
 Ile Pro Glu Lys Leu Val Thr Leu His Gly Thr Pro Ala Val Ser Glu
 2515 2520 2525
 Lys Pro Asp Val Ala Thr Val Thr Ala Asn Val Ser Ile His Gly Thr
 2530 2535 2540
 Phe Ser Leu Gly Pro Ser Ile Val Tyr Ile Glu Glu Glu Met Lys Asn
 2545 2550 2555 2560
 Gly Thr Phe Asn Thr Ala Glu Val Leu Ile Arg Arg Thr Gly Phe
 2565 2570 2575
 Thr Gly Asn Val Ser Ile Thr Val Lys Thr Phe Gly Glu Arg Cys Ala
 2580 2585 2590
 Gln Met Glu Pro Asn Ala Leu Pro Phe Arg Gly Ile Tyr Gly Ile Ser
 2595 2600 2605

Asn Leu Thr Trp Ala Val Glu Glu Glu Asp Phe Glu Glu Gln Thr Leu
 2610 2615 2620
 Thr Leu Ile Phe Leu Asp Gly Glu Arg Glu Arg Lys Val Ser Val Gln
 2625 2630 2635 2640
 Ile Leu Asp Asp Asp Glu Pro Glu Gly Gln Glu Phe Phe Tyr Val Phe
 2645 2650 2655
 Leu Thr Asn Pro Gln Gly Gly Ala Gln Ile Val Glu Gly Lys Asp Asp
 2660 2665 2670
 Thr Gly Phe Ala Ala Phe Ala Met Val Ile Ile Thr Gly Ser Asp Leu
 2675 2680 2685
 His Asn Gly Ile Ile Gly Phe Ser Glu Glu Ser Gln Ser Gly Leu Gln
 2690 2695 2700
 Leu Arg Glu Gly Ala Val Met Arg Arg Leu His Leu Ile Val Thr Arg
 2705 2710 2715 2720
 Gln Pro Asn Arg Ala Phe Glu Asp Val Lys Val Phe Trp Arg Val Thr
 2725 2730 2735
 Leu Asn Lys Thr Val Val Val Leu Gln Lys Asp Gly Val Asn Leu Met
 2740 2745 2750
 Glu Glu Leu Gln Ser Val Ser Gly Thr Thr Cys Thr Met Gly Gln
 2755 2760 2765
 Thr Lys Cys Phe Ile Ser Ile Glu Leu Lys Pro Glu Lys Val Pro Gln
 2770 2775 2780
 Val Glu Val Tyr Phe Phe Val Glu Leu Tyr Glu Ala Thr Ala Gly Ala
 2785 2790 2795 2800
 Ala Ile Asn Asn Ser Ala Arg Phe Ala Gln Ile Lys Ile Leu Glu Ser
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 Asp Glu Ser Gln Ser Leu Val Tyr Phe Ser Val Gly Ser Arg Leu Ala
 2820 2825 2830
 Val Ala His Lys Lys Ala Thr Leu Ile Ser Leu Gln Val Ala Arg Asp
 2835 2840 2845
 Ser Gly Thr Gly Leu Met Met Ser Val Asn Phe Ser Thr Gln Glu Leu
 2850 2855 2860
 Arg Ser Ala Glu Thr Ile Gly Arg Thr Ile Ile Ser Pro Ala Ile Ser
 2865 2870 2875 2880
 Gly Lys Asp Phe Val Ile Thr Glu Gly Thr Leu Val Phe Glu Pro Gln
 2885 2890 2895
 Gln Arg Ser Thr Val Leu Asp Val Ile Leu Thr Pro Glu Thr Gly Ser
 2900 2905 2910
 Leu Asn Ser Phe Pro Lys Arg Phe Gln Ile Val Leu Phe Asp Pro Lys
 2915 2920 2925
 Gly Gly Ala Arg Ile Asp Lys Val Tyr Gly Thr Ala Asn Ile Thr Leu
 2930 2935 2940
 Val Ser Asp Ala Asp Ser Gln Ala Ile Trp Gly Leu Ala Asp Gln Leu
 2945 2950 2955 2960
 His Gln Pro Val Asn Asp Arg Ile Leu Asn Arg Val Leu His Thr Ile
 2965 2970 2975
 Ser Met Lys Val Ala Thr Glu Asn Thr Asp Glu Gln Leu Ser Ala Met
 2980 2985 2990
 Met His Leu Ile Glu Lys Ile Thr Thr Glu Gly Lys Ile Gln Ala Phe
 2995 3000 3005
 Ser Val Ala Ser Arg Thr Leu Phe Tyr Glu Ile Leu Cys Ser Leu Ile
 3010 3015 3020
 Asn Pro Lys Arg Lys Asp Thr Arg Gly Phe Ser His Phe Ala Glu Leu
 3025 3030 3035 3040
 Thr Glu Asn Phe Ala Phe Ser Leu Leu Thr Asn Val Thr Cys Gly Ser
 3045 3050 3055
 Pro Gly Glu Lys Ser Lys Thr Ile Leu Asp Ser Cys Pro Tyr Leu Ser
 3060 3065 3070
 Ile Leu Ala Leu His Trp Tyr Pro Gln Gln Ile Asn Gly His Lys Phe
 3075 3080 3085
 Glu Gly Lys Glu Gly Asp Tyr Ile Arg Ile Pro Glu Arg Leu Leu Asp
 3090 3095 3100
 Val Gln Asp Ala Glu Ile Met Ala Gly Lys Ser Thr Cys Lys Leu Val
 3105 3110 3115 3120

Gln Phe Thr Glu Tyr Ser Ser Gln Gln Trp Phe Ile Ser Gly Asn Asn
 3125 3130 3135
 Leu Pro Thr Leu Lys Asn Lys Val Leu Ser Leu Ser Val Lys Gly Gln
 3140 3145 3150
 Ser Ser Gln Leu Leu Thr Asn Asp Asn Glu Val Leu Tyr Arg Ile Tyr
 3155 3160 3165
 Ala Ala Glu Pro Arg Ile Ile Pro Gln Thr Ser Leu Cys Leu Leu Trp
 3170 3175 3180
 Asn Gln Ala Ala Ala Ser Trp Leu Ser Asp Ser Gln Phe Cys Lys Val
 3185 3190 3195 3200
 Ile Glu Thr Ala Asp Tyr Val Glu Cys Ala Cys Leu His Met Ser
 3205 3210 3215
 Val Tyr Ala Val Tyr Ala Arg Thr Asp Asn Leu Ser Ser Tyr Asn Glu
 3220 3225 3230
 Ala Phe Phe Thr Ser Gly Phe Ile Cys Ile Ser Gly Leu Cys Leu Ala
 3235 3240 3245
 Val Leu Ser His Ile Phe Cys Ala Arg Tyr Ser Met Phe Ala Ala Lys
 3250 3255 3260
 Leu Leu Thr His Met Met Ala Ala Ser Leu Gly Thr Gln Ile Leu Phe
 3265 3270 3275 3280
 Leu Ala Ser Ala Tyr Ala Ser Pro Gln Leu Ala Glu Glu Ser Cys Ser
 3285 3290 3295
 Ala Met Ala Ala Val Thr His Tyr Leu Tyr Leu Cys Gln Phe Ser Tyr
 3300 3305 3310
 Met Leu Ile Gln Ser Val Asn Phe Trp Tyr Val Leu Val Met Asn Asp
 3315 3320 3325
 Glu His Thr Glu Arg Arg Tyr Leu Leu Phe Phe Leu Leu Ser Trp Gly
 3330 3335 3340
 Leu Pro Ala Phe Val Val Ile Leu Leu Ile Val Ile Leu Lys Gly Ile
 3345 3350 3355 3360
 Tyr His Gln Ser Met Ser Gln Ile Tyr Gly Leu Ile His Gly Asp Leu
 3365 3370 3375
 Cys Phe Ile Pro Asn Val Tyr Ala Ala Leu Phe Thr Ala Ala Leu Val
 3380 3385 3390
 Pro Leu Thr Cys Leu Val Val Phe Val Val Phe Ile His Ala Tyr
 3395 3400 3405
 Gln Val Lys Pro Gln Trp Lys Ala Tyr Asp Asp Val Phe Arg Gly Arg
 3410 3415 3420
 Thr Asn Ala Ala Glu Ile Pro Leu Ile Leu Tyr Leu Phe Ala Leu Ile
 3425 3430 3435 3440
 Ser Val Thr Trp Leu Trp Gly Gly Leu His Met Ala Tyr Arg His Phe
 3445 3450 3455
 Trp Met Leu Val Leu Phe Val Ile Phe Asn Ser Leu Gln Leu Leu Val
 3460 3465 3470
 Pro Ser Val Leu Leu Phe Thr Ser Met Arg Ser Thr Phe Phe Ser Phe
 3475 3480 3485
 His Thr Gly Thr Leu Thr Ser Arg Glu Lys Lys Ser Thr Phe Val Leu
 3490 3495 3500
 Thr Cys Leu Leu Ser Pro Asp Ser Lys Gly Leu Gly Val Leu Cys Phe
 3505 3510 3515 3520
 Leu Asn Thr Glu Trp Ala Phe Gln Val His
 3525 3530

<210> 1102
<211> 945
<212>Amino acid
<213> Homo sapiens

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<222> (1)...(945)
<223> X = any amino acid or stop code
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 Gly Arg Asp Arg Gly Arg Ser His Ala Ala Glu Ala Pro Gly Asp Pro
 35 40 45
 Gln Ala Ala Ala Ser Leu Leu Ala Pro Met Asp Val Gly Glu Glu Pro
 50 55 60
 Leu Glu Lys Ala Ala Arg Ala Arg Thr Ala Lys Asp Pro Asn Thr Tyr
 65 70 75 80
 Lys Val Leu Ser Leu Val Leu Ser Val Cys Val Leu Thr Thr Ile Leu
 85 90 95
 Gly Cys Ile Phe Gly Leu Lys Pro Ser Cys Ala Lys Glu Val Lys Ser
 100 105 110
 Cys Lys Gly Arg Cys Phe Glu Arg Thr Phe Gly Asn Cys Arg Cys Asp
 115 120 125
 Ala Ala Cys Val Glu Leu Gly Asn Cys Cys Leu Gly Leu Pro Gly Gly
 130 135 140
 Thr Cys Ile Glu Pro Glu His Ile Trp Thr Cys Asn Lys Phe Arg Cys
 145 150 155 160
 Gly Glu Lys Arg Ile Thr Arg Ser Leu Cys Ala Cys Ser Asp Asp Cys
 165 170 175
 Lys Asp Arg Gly Asp Cys Leu Pro Ser Asn Leu Gln Phe Leu Cys Val
 180 185 190
 Gln Gly Glu Lys Ser Trp Gly Arg Lys Asn Pro Cys Glu Ser His Leu
 195 200 205
 Met Glu Pro Gln Cys Pro Ala Gly Phe Glu Thr Pro Ser Leu Pro Leu
 210 215 220
 Leu Ile Phe Ser Leu Asp Gly Phe Arg Ala Glu Tyr Leu His Thr Trp
 225 230 235 240
 Gly Gly Leu Leu Pro Val Ile Ser Lys Leu Lys Lys Cys Gly Thr Tyr
 245 250 255
 Thr Lys Asn Met Arg Pro Val Tyr Pro Thr Lys Thr Phe Pro Asn His
 260 265 270
 Tyr Ser Ile Val Thr Gly Leu Tyr Pro Glu Ser His Gly Ile Ile Asn
 275 280 285
 Asn Lys Met Tyr Asp Pro Lys Met Asn Ala Ser Phe Ser Leu Lys Ser
 290 295 300
 Lys Glu Lys Phe Asn Pro Glu Trp Tyr Lys Gly Glu Pro Ile Trp Val
 305 310 315 320
 Thr Ala Lys Tyr Gln Gly Leu Lys Ser Gly Thr Phe Phe Trp Pro Gly
 325 330 335
 Ser Asp Val Glu Ile Asn Gly Ile Phe Pro Asp Ile Tyr Lys Met Tyr
 340 345 350
 Asn Gly Ser Val Pro Phe Glu Glu Arg Ile Leu Ala Val Leu Gln Trp
 355 360 365
 Leu Gln Leu Pro Lys Asp Glu Arg Pro His Phe Tyr Thr Leu Tyr Leu
 370 375 380
 Glu Glu Pro Asp Ser Ser Gly His Ser Tyr Gly Pro Val Ser Ser Glu
 385 390 395 400
 Val Ile Lys Ala Leu Gln Arg Val Asp Gly Met Val Gly Met Leu Met
 405 410 415
 Asp Gly Leu Lys Glu Leu Asn Leu His Arg Cys Leu Asn Leu Ile Leu
 420 425 430
 Ile Ser Asp His Gly Met Glu Gln Gly Ser Cys Lys Lys Tyr Ile Tyr
 435 440 445
 Leu Asn Lys Tyr Leu Gly Asp Val Lys Asn Ile Lys Val Ile Tyr Gly
 450 455 460
 Pro Ala Ala Arg Leu Arg Pro Ser Asp Val Pro Asp Lys Tyr Tyr Ser

| | | | |
|---|-----|-----|-----|
| 465 | 470 | 475 | 480 |
| Phe Asn Tyr Glu Gly Ile Ala Arg Asn Leu Ser Cys Arg Glu Pro Asn | | | |
| 485 | 490 | 495 | |
| Gln His Phe Lys Pro Tyr Leu Lys His Phe Leu Pro Lys Arg Leu His | | | |
| 500 | 505 | 510 | |
| Phe Ala Lys Ser Asp Arg Ile Glu Pro Leu Thr Phe Tyr Leu Asp Pro | | | |
| 515 | 520 | 525 | |
| Gln Trp Gln Leu Ala Leu Asn Pro Ser Glu Arg Lys Tyr Cys Gly Ser | | | |
| 530 | 535 | 540 | |
| Gly Phe His Gly Ser Asp Asn Val Phe Ser Asn Met Gln Ala Leu Phe | | | |
| 545 | 550 | 555 | 560 |
| Val Gly Tyr Gly Pro Gly Phe Lys His Gly Ile Glu Ala Asp Thr Phe | | | |
| 565 | 570 | 575 | |
| Glu Asn Ile Glu Val Tyr Asn Leu Met Cys Asp Leu Leu Asn Leu Thr | | | |
| 580 | 585 | 590 | |
| Pro Ala Pro Asn Asn Gly Thr His Gly Ser Leu Asn His Leu Leu Lys | | | |
| 595 | 600 | 605 | |
| Asn Pro Val Tyr Thr Pro Lys His Pro Lys Glu Val His Pro Leu Val | | | |
| 610 | 615 | 620 | |
| Gln Cys Pro Phe Thr Arg Asn Pro Arg Asp Asn Leu Gly Cys Ser Cys | | | |
| 625 | 630 | 635 | 640 |
| Asn Pro Ser Ile Leu Pro Ile Glu Asp Phe Gln Thr Gln Phe Asn Leu | | | |
| 645 | 650 | 655 | |
| Thr Val Ala Glu Glu Lys Ile Ile Lys His Glu Thr Leu Pro Tyr Gly | | | |
| 660 | 665 | 670 | |
| Arg Pro Arg Val Leu Glu Lys Glu Asn Thr Ile Cys Leu Leu Ser Gln | | | |
| 675 | 680 | 685 | |
| His Gln Phe Met Ser Gly Tyr Ser Gln Asp Ile Leu Met Pro Leu Trp | | | |
| 690 | 695 | 700 | |
| Thr Ser Tyr Thr Val Asp Arg Asn Asp Ser Phe Ser Thr Glu Asp Phe | | | |
| 705 | 710 | 715 | 720 |
| Ser Asn Cys Leu Tyr Gln Asp Phe Arg Ile Pro Leu Ser Pro Val His | | | |
| 725 | 730 | 735 | |
| Lys Cys Ser Phe Tyr Lys Asn Asn Thr Lys Val Ser Tyr Gly Phe Leu | | | |
| 740 | 745 | 750 | |
| Ser Pro Pro Gln Leu Asn Lys Asn Ser Ser Gly Ile Tyr Ser Glu Ala | | | |
| 755 | 760 | 765 | |
| Leu Leu Thr Thr Asn Ile Val Pro Met Tyr Gln Ser Phe Gln Val Ile | | | |
| 770 | 775 | 780 | |
| Trp Arg Tyr Phe His Asp Thr Leu Leu Arg Lys Tyr Ala Glu Glu Arg | | | |
| 785 | 790 | 795 | 800 |
| Asn Gly Val Asn Val Val Ser Gly Pro Val Phe Asp Phe Asp Tyr Asp | | | |
| 805 | 810 | 815 | |
| Gly Arg Cys Asp Ser Leu Glu Asn Leu Arg Gln Lys Arg Arg Val His | | | |
| 820 | 825 | 830 | |
| Pro Val Thr Gln Glu Asn Phe Trp Ile Pro Asn Ser Thr Ser Phe Tyr | | | |
| 835 | 840 | 845 | |
| Val Val Leu Thr Ser Cys Lys Asp Thr Ser Gln Thr Pro Leu His Cys | | | |
| 850 | 855 | 860 | |
| Glu Asn Leu Asp Thr Leu Gly Phe Pro Phe Cys Leu His Arg Asp Trp | | | |
| 865 | 870 | 875 | 880 |
| Ile Asn Ser Glu Thr Cys Val His Gly Lys His Asp Ser Ser Trp Val | | | |
| 885 | 890 | 895 | |
| Glu Glu Phe Val Lys Cys Leu His Arg Ala Arg Ile Thr Gly Cys Xaa | | | |
| 900 | 905 | 910 | |
| Gly Thr Ser Leu Gly Leu Ser Phe Tyr Gln Gln Arg Lys Glu Pro Val | | | |
| 915 | 920 | 925 | |
| Ser Asp Ile Leu Lys Leu Lys Thr His Leu Pro Thr Phe Ser Gln Glu | | | |
| 930 | 935 | 940 | |
| Asp | | | |
| 945 | | | |

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<213> Homo sapiens

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Leu Pro Gly Arg Lys Ala Ser Cys Ser Thr Ala Gly Ser Gly Ser Arg
35 40 45
Gly Leu Pro Pro Leu Ser Pro Met Val Ser Ser Ala His Asn Pro Asn
50 55 60
Lys Ala Glu Ile Pro Glu Arg Arg Lys Asp Ser Thr Ser Thr Pro Asn
65 70 75 80
Asn Leu Pro Pro Ser Met Met Thr Arg Arg Asn Thr Tyr Val Cys Thr
85 90 95
Glu Arg Pro Ala Glu Arg Pro Ser Leu Leu Pro Asn Gly Lys Glu
100 105 110
Asn Ser Ser Gly Thr Pro Arg Val Pro Pro Ala Ser Pro Ser Ser His
115 120 125
Ser Leu Ala Pro Pro Ser Gly Glu Arg Ser Arg Leu Ala Arg Gly Ser
130 135 140
Thr Ile Arg Ser Thr Phe His Gly Gly Gln Val Arg Asp Arg Arg Ala
145 150 155 160
Gly Gly Trp Gly Trp Phe Asn Lys His Ala Leu Gln Arg Ala Pro
165 170 175
Arg Asn Ala Gly Ala Pro Ser Leu Met Pro Gly His Arg Thr Val Leu
180 185 190
Ile Asn Tyr Gly Gly Gly Gln Asp Leu Lys Asn Trp Glu Thr Cys Leu
195 200 205
Ala Ala Pro Pro Asn Lys His Arg Arg
210 215 217

<210>, 1104
<211> 436
<212>Amino acid
<213> Homo sapiens

<400> 1104
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20 25 30
Ser Asn Met Thr Tyr Gly Thr Phe Asn Phe Leu Gly Gly Arg Leu Met
35 40 45
Ile Pro Asn Thr Gly Ile Ser Leu Leu Ile Pro Pro Asp Ala Ile Pro
50 55 60
Arg Gly Lys Ile Tyr Glu Ile Tyr Leu Thr Leu His Lys Pro Glu Asp
65 70 75 80
Val Arg Leu Pro Leu Ala Gly Cys Gln Thr Leu Leu Ser Pro Ile Val
85 90 95
Ser Cys Gly Pro Pro Gly Val Leu Leu Thr Arg Pro Val Ile Leu Gly
100 105 110
Met Asp His Cys Gly Glu Pro Ser Pro Asp Ser Trp Ser Leu Arg Leu

| | | |
|---|-----|-----|
| 115 | 120 | 125 |
| Lys Lys Gln Ser Cys Glu Gly Ser Trp Glu Asp Val Leu His Leu Gly | | |
| 130 | 135 | 140 |
| Glu Glu Ala Pro Ser His Leu Tyr Tyr Cys Gln Leu Glu Ala Ser Ala | | |
| 145 | 150 | 155 |
| Cys Tyr Val Phe Thr Glu Gln Leu Ser Arg Tyr Ala Leu Val Gly Glu | | |
| 165 | 170 | 175 |
| Ala Leu Ser Val Ala Ala Ala Lys Arg Leu Lys Leu Leu Phe Ala | | |
| 180 | 185 | 190 |
| Pro Val Ala Cys Thr Ser Leu Glu Tyr Asn Ile Leu Val Tyr Cys Leu | | |
| 195 | 200 | 205 |
| His Asp Thr His Asp Ala Leu Asn Val Val Gln Leu Glu Lys Gln | | |
| 210 | 215 | 220 |
| Leu Gln Gly Gln Leu Ile Gln Glu Pro Leu Val Leu His Phe Lys Asp | | |
| 225 | 230 | 235 |
| Ser Tyr His Asn Leu Arg Leu Ser Ile His Asp Val Pro Ser Ser Leu | | |
| 245 | 250 | 255 |
| Trp Lys Ser Lys Leu Leu Val Ser Tyr Gln Glu Ile Pro Phe Tyr His | | |
| 260 | 265 | 270 |
| Ile Trp Asn Gly Thr Gln Arg Tyr Leu His Cys Thr Phe Thr Leu Glu | | |
| 275 | 280 | 285 |
| Arg Val Ser Pro Ser Thr Ser Asp Leu Ala Cys Lys Leu Trp Val Trp | | |
| 290 | 295 | 300 |
| Gln Val Glu Gly Asp Gly Gln Ser Phe Ser Ile Asn Phe Asn Ile Thr | | |
| 305 | 310 | 315 |
| Lys Asp Thr Arg Phe Ala Glu Leu Leu Ala Leu Glu Ser Glu Ala Gly | | |
| 325 | 330 | 335 |
| Val Pro Ala Leu Val Gly Pro Ser Ala Phe Lys Ile Pro Phe Leu Ile | | |
| 340 | 345 | 350 |
| Arg Gln Lys Ile Ile Ser Ser Leu Asp Pro Pro Cys Arg Arg Gly Ala | | |
| 355 | 360 | 365 |
| Asp Trp Arg Thr Leu Ala Gln Lys Leu His Leu Asp Ser His Leu Ser | | |
| 370 | 375 | 380 |
| Phe Phe Ala Ser Lys Pro Ser Pro Thr Ala Met Ile Leu Asn Leu Trp | | |
| 385 | 390 | 395 |
| Glu Ala Arg His Phe Pro Asn Gly Asn Leu Ser Gln Leu Ala Ala Ala | | |
| 405 | 410 | 415 |
| Val Ala Gly Thr Gly Pro Ala Gly Arg Trp Leu Leu Ser Gln Cys Ser | | |
| 420 | 425 | 430 |
| Glu Ala Glu Cys | | |
| 435 | 436 | |

<210> 1105
<211> 113
<212>Amino acid
<213> Homo sapiens

| | | | |
|---|----|----|----|
| <400> 1105 | | | |
| Gly Ser Ala Ala Gly Gln Val Gln Gln Gln Gln Arg Arg His Gln | | | |
| 1 | 5 | 10 | 15 |
| Gln Gly Lys Val Thr Val Lys Tyr Asp Arg Lys Glu Leu Arg Lys Arg | | | |
| 20 | 25 | 30 | |
| Leu Val Leu Glu Glu Trp Ile Val Glu Gln Leu Gly Gln Leu Tyr Gly | | | |
| 35 | 40 | 45 | |
| Cys Glu Glu Glu Glu Met Pro Glu Val Glu Ile Asp Ile Asp Asp Leu | | | |
| 50 | 55 | 60 | |
| Phe Asp Ala Tyr Ser Asp Glu Gln Arg Ala Ser Lys Leu Gln Glu Ala | | | |
| 65 | 70 | 75 | 80 |
| Leu Val Asp Cys Tyr Lys Pro Thr Glu Glu Phe Ile Lys Glu Leu Leu | | | |

| | | | |
|---|-----|-----|----|
| | 85 | 90 | 95 |
| Ser Arg Ile Arg Gly Met Arg Lys Leu Ser Pro Pro Gln Lys Lys Ser | | | |
| 100 | 105 | 110 | |
| Val | | | |
| 113 | | | |

<210> 1106
<211> 464
<212>Amino acid
<213> Homo sapiens

| | | | |
|---|-----|-----|-----|
| <400> 1106 | | | |
| Ile Met Leu Asp Gly Arg Val Arg Trp Leu Thr Pro Val Ile Ser Ala | | | |
| 1 | 5 | 10 | 15 |
| Leu Trp Glu Ala Glu Met Glu Asp Val Ile Ala Arg Met Gln Asp Glu | | | |
| 20 | 25 | 30 | |
| Lys Asn Gly Ile Pro Ile Arg Thr Val Lys Ser Phe Leu Ser Lys Ile | | | |
| 35 | 40 | 45 | |
| Pro Ser Val Phe Ser Gly Ser Asp Ile Val Gln Trp Leu Ile Lys Asn | | | |
| 50 | 55 | 60 | |
| Leu Thr Ile Glu Asp Pro Val Glu Ala Leu His Leu Gly Thr Leu Met | | | |
| 65 | 70 | 75 | 80 |
| Ala Ala His Gly Tyr Phe Phe Pro Ile Ser Asp His Val Leu Thr Leu | | | |
| 85 | 90 | 95 | |
| Lys Asp Asp Gly Thr Phe Tyr Arg Phe Gln Thr Pro Tyr Phe Trp Pro | | | |
| 100 | 105 | 110 | |
| Ser Asn Cys Trp Glu Pro Glu Asn Thr Asp Tyr Ala Val Tyr Leu Cys | | | |
| 115 | 120 | 125 | |
| Lys Arg Thr Met Gln Asn Lys Ala Arg Leu Glu Leu Ala Asp Tyr Glu | | | |
| 130 | 135 | 140 | |
| Ala Glu Ser Leu Ala Arg Leu Gln Arg Ala Phe Ala Arg Lys Trp Glu | | | |
| 145 | 150 | 155 | 160 |
| Phe Ile Phe Met Gln Ala Glu Ala Gln Ala Lys Val Asp Lys Lys Arg | | | |
| 165 | 170 | 175 | |
| Asp Lys Ile Glu Arg Lys Ile Leu Asp Ser Gln Glu Arg Ala Phe Trp | | | |
| 180 | 185 | 190 | |
| Asp Val His Arg Pro Val Pro Gly Cys Val Asn Thr Thr Glu Val Asp | | | |
| 195 | 200 | 205 | |
| Ile Lys Lys Ser Ser Arg Met Arg Asn Pro His Lys Thr Arg Lys Ser | | | |
| 210 | 215 | 220 | |
| Val Tyr Gly Leu Gln Asn Asp Ile Arg Ser His Ser Pro Thr His Thr | | | |
| 225 | 230 | 235 | 240 |
| Pro Thr Pro Glu Thr Lys Pro Pro Thr Glu Asp Glu Leu Gln Gln Gln | | | |
| 245 | 250 | 255 | |
| Ile Lys Tyr Trp Gln Ile Gln Leu Asp Arg His Arg Leu Lys Met Ser | | | |
| 260 | 265 | 270 | |
| Lys Val Ala Asp Ser Leu Leu Ser Tyr Thr Glu Gln Tyr Leu Glu Tyr | | | |
| 275 | 280 | 285 | |
| Asp Pro Phe Leu Leu Pro Pro Asp Pro Ser Asn Pro Trp Leu Ser Asp | | | |
| 290 | 295 | 300 | |
| Asp Thr Thr Phe Trp Glu Leu Glu Ala Ser Lys Glu Pro Ser Gln Gln | | | |
| 305 | 310 | 315 | 320 |
| Arg Val Lys Arg Trp Gly Phe Gly Met Asp Glu Ala Leu Lys Asp Pro | | | |
| 325 | 330 | 335 | |
| Val Gly Arg Glu Gln Phe Leu Lys Phe Leu Glu Ser Glu Phe Ser Ser | | | |
| 340 | 345 | 350 | |
| Glu Asn Leu Arg Phe Trp Leu Ala Val Glu Asp Leu Lys Lys Arg Pro | | | |
| 355 | 360 | 365 | |
| Ile Lys Glu Val Pro Ser Arg Val Gln Glu Ile Trp Gln Glu Phe Leu | | | |

| | | |
|---|-----|-----|
| 370 | 375 | 380 |
| Ala Pro Gly Ala Pro Ser Ala Ile Asn Leu Asp Ser Lys Ser Tyr Asp | | |
| 385 | 390 | 395 |
| Lys Thr Thr Gln Asn Val Lys Glu Pro Gly Arg Tyr Thr Phe Glu Asp | | 400 |
| 405 | 410 | 415 |
| Ala Gln Glu His Ile Tyr Lys Leu Met Lys Ser Asp Ser Tyr Pro Arg | | |
| 420 | 425 | 430 |
| Phe Ile Arg Ser Ser Ala Tyr Gln Glu Leu Leu Gln Ala Lys Lys Lys | | |
| 435 | 440 | 445 |
| Gly Lys Ser Leu Thr Ser Lys Arg Leu Thr Ser Leu Ala Gln Ser Tyr | | |
| 450 | 455 | 460 |
| | | 464 |

<210> 1107
<211> 153
<212>Amino acid
<213> Homo sapiens

| | | |
|---|-----|-----|
| <400> 1107 | | |
| Gly Thr Arg Asp Tyr Pro Arg Ile Val Asn His Leu Asp His Thr Tyr | | |
| 1 | 5 | 10 |
| Val Thr Ala Pro Gln Ala Phe Met Met Phe Gln Tyr Phe Val Lys Val | | |
| 20 | 25 | 30 |
| Val Pro Thr Val Tyr Met Lys Val Asp Gly Glu Val Leu Thr Thr Asn | | |
| 35 | 40 | 45 |
| Gln Ile Tyr Val Thr Arg His Glu Lys Ala Ala Tyr Val Leu Met Gly | | |
| 50 | 55 | 60 |
| Asp Gln Gly Leu Pro Gly Val Phe Ile Leu Tyr Glu Leu Ser Pro Met | | |
| 65 | 70 | 75 |
| Met Val Asn Leu Thr Glu Ile His Thr Phe Phe Ser Leu Phe Leu Thr | | 80 |
| 85 | 90 | 95 |
| Ile Val Gly Ala Thr Ile Gly Gly Met Phe Phe Glu His Phe Val Ile | | |
| 100 | 105 | 110 |
| Asn Tyr Leu Thr His Lys Trp Gly Leu Gly Phe Tyr Phe Lys Asn Glu | | |
| 115 | 120 | 125 |
| Asn Ser Leu Gln Gly Gly His Arg Thr Leu Tyr Gly Val Asn Phe Phe | | |
| 130 | 135 | 140 |
| Met Tyr Trp Ser Leu Arg Gly Gly Ser | | |
| 145 | 150 | 153 |

<210> 1108
<211> 506
<212>Amino acid
<213> Homo sapiens

| | | |
|---|----|----|
| <400> 1108 | | |
| Ser Val Trp Trp Asn Ser Gln Arg Gln Phe Val Val Arg Ala Trp Gly | | |
| 1 | 5 | 10 |
| Cys Ala Gly Pro Cys Gly Arg Ala Val Phe Leu Ala Phe Gly Leu Gly | | |
| 20 | 25 | 30 |
| Leu Gly Leu Ile Glu Glu Lys Gln Ala Glu Ser Arg Arg Ala Val Ser | | |
| 35 | 40 | 45 |
| Ala Cys Gln Glu Ile Gln Ala Ile Phe Thr Gln Lys Ser Lys Pro Gly | | |

| | | |
|---|-----|-----|
| 50 | 55 | 60 |
| Pro Asp Pro Leu Asp Thr Arg Arg Leu Gln Gly Phe Arg Leu Glu Glu | | |
| 65 | 70 | 75 |
| Tyr Leu Ile Gly Gln Ser Ile Gly Lys Gly Cys Ser Ala Ala Val Tyr | | 80 |
| 85 | 90 | 95 |
| Glu Ala Thr Met Pro Thr Leu Pro Gln Asn Leu Glu Val Thr Lys Ser | | |
| 100 | 105 | 110 |
| Thr Gly Leu Leu Pro Gly Arg Gly Pro Gly Thr Ser Ala Pro Gly Glu | | |
| 115 | 120 | 125 |
| Gly Gln Glu Arg Ala Pro Gly Ala Pro Ala Phe Pro Leu Ala Ile Lys | | |
| 130 | 135 | 140 |
| Met Met Trp Asn Ile Ser Ala Gly Ser Ser Glu Ala Ile Leu Asn | | |
| 145 | 150 | 155 |
| Thr Met Ser Gln Glu Leu Val Pro Ala Ser Arg Val Ala Leu Ala Gly | | |
| 165 | 170 | 175 |
| Glu Tyr Gly Ala Val Thr Tyr Arg Lys Ser Lys Arg Gly Pro Lys Gln | | |
| 180 | 185 | 190 |
| Leu Ala Pro His Pro Asn Ile Ile Arg Val Leu Arg Ala Phe Thr Ser | | |
| 195 | 200 | 205 |
| Ser Val Pro Leu Leu Pro Gly Ala Leu Val Asp Tyr Pro Asp Val Leu | | |
| 210 | 215 | 220 |
| Pro Ser Arg Leu His Pro Glu Gly Leu Gly His Gly Arg Thr Leu Phe | | |
| 225 | 230 | 235 |
| Leu Val Met Lys Asn Tyr Pro Cys Thr Leu Arg Gln Tyr Leu Cys Val | | |
| 245 | 250 | 255 |
| Asn Thr Pro Ser Pro Arg Leu Ala Ala Met Met Leu Leu Gln Leu Leu | | |
| 260 | 265 | 270 |
| Glu Gly Val Asp His Leu Val Gln Gln Gly Ile Ala His Arg Asp Leu | | |
| 275 | 280 | 285 |
| Lys Ser Asp Asn Ile Leu Val Glu Leu Asp Pro Asp Gly Cys Pro Trp | | |
| 290 | 295 | 300 |
| Leu Val Ile Ala Asp Phe Gly Cys Cys Leu Ala Asp Glu Ser Ile Gly | | |
| 305 | 310 | 315 |
| Leu Gln Leu Pro Phe Ser Ser Trp Tyr Val Asp Arg Gly Gly Asn Gly | | |
| 325 | 330 | 335 |
| Cys Leu Met Ala Pro Glu Val Ser Thr Ala Arg Pro Gly Pro Arg Ala | | |
| 340 | 345 | 350 |
| Val Ile Asp Tyr Ser Lys Ala Asp Ala Trp Ala Val Gly Ala Ile Ala | | |
| 355 | 360 | 365 |
| Tyr Glu Ile Phe Gly Leu Val Asn Pro Phe Tyr Gly Gln Gly Lys Ala | | |
| 370 | 375 | 380 |
| His Leu Glu Ser Arg Ser Tyr Gln Glu Ala Gln Leu Pro Ala Leu Pro | | |
| 385 | 390 | 395 |
| Glu Ser Val Pro Pro Asp Val Arg Gln Leu Val Arg Ala Leu Leu Gln | | |
| 405 | 410 | 415 |
| Arg Glu Ala Ser Lys Arg Pro Ser Ala Arg Val Ala Ala Asn Val Leu | | |
| 420 | 425 | 430 |
| His Leu Ser Leu Trp Gly Glu His Ile Leu Ala Leu Lys Asn Leu Lys | | |
| 435 | 440 | 445 |
| Leu Asp Lys Met Val Gly Trp Leu Leu Gln Gln Ser Ala Ala Thr Leu | | |
| 450 | 455 | 460 |
| Leu Ala Asn Arg Leu Thr Glu Lys Cys Cys Val Glu Thr Lys Met Lys | | |
| 465 | 470 | 475 |
| Met Leu Phe Leu Ala Asn Leu Glu Cys Glu Thr Leu Cys Gln Ala Ala | | |
| 485 | 490 | 495 |
| Leu Leu Leu Cys Ser Trp Arg Ala Ala Leu | | |
| 500 | 505 | 506 |

<210> 1109

<211> 382

<212>Amino acid

<213> Homo sapiens

<400> 1109

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Arg | Pro | Leu | Leu | Arg | Leu | Ala | Glu | Leu | Pro | Asp | His | Cys | Tyr | Arg | Met |
| 1 | | | | | 5 | | | | 10 | | | | | 15 | |
| Asn | Ser | Ser | Pro | Ala | Gly | Thr | Pro | Ser | Pro | Gln | Pro | Ser | Arg | Ala | Asn |
| | | | | | 20 | | | 25 | | | | | 30 | | |
| Gly | Asn | Ile | Asn | Leu | Gly | Pro | Ser | Ala | Asn | Pro | Asn | Ala | Gln | Pro | Thr |
| | | | | | 35 | | | 40 | | | | | 45 | | |
| Asp | Phe | Asp | Phe | Leu | Lys | Val | Ile | Gly | Lys | Gly | Asn | Tyr | Gly | Lys | Val |
| | | | | | 50 | | | 55 | | | | 60 | | | |
| Leu | Leu | Ala | Lys | Arg | Lys | Ser | Asp | Gly | Ala | Phe | Tyr | Ala | Val | Lys | Val |
| | | | | | 65 | | | 70 | | | 75 | | 80 | | |
| Leu | Gln | Lys | Lys | Ser | Ile | Leu | Lys | Lys | Lys | Glu | Gln | Ser | His | Ile | Met |
| | | | | | 85 | | | 90 | | | 95 | | | | |
| Ala | Glu | Arg | Ser | Val | Leu | Leu | Lys | Asn | Val | Arg | His | Pro | Phe | Leu | Val |
| | | | | | 100 | | | 105 | | | | | 110 | | |
| Gly | Leu | Arg | Tyr | Ser | Phe | Gln | Thr | Pro | Glu | Lys | Leu | Tyr | Phe | Val | Leu |
| | | | | | 115 | | | 120 | | | | 125 | | | |
| Asp | Tyr | Val | Asn | Gly | Gly | Glu | Leu | Phe | Phe | His | Leu | Gln | Arg | Glu | Arg |
| | | | | | 130 | | | 135 | | | | 140 | | | |
| Arg | Phe | Leu | Glu | Pro | Arg | Ala | Arg | Phe | Tyr | Ala | Ala | Glu | Val | Ala | Ser |
| | | | | | 145 | | | 150 | | | 155 | | 160 | | |
| Ala | Ile | Gly | Tyr | Leu | His | Ser | Leu | Asn | Ile | Ile | Tyr | Arg | Asp | Leu | Lys |
| | | | | | 165 | | | 170 | | | 175 | | | | |
| Pro | Glu | Asn | Ile | Leu | Leu | Asp | Cys | Gln | Gly | His | Val | Val | Leu | Thr | Asp |
| | | | | | 180 | | | 185 | | | 190 | | | | |
| Phe | Gly | Leu | Cys | Lys | Glu | Gly | Val | Glu | Pro | Glu | Asp | Thr | Thr | Ser | Thr |
| | | | | | 195 | | | 200 | | | 205 | | | | |
| Phe | Cys | Gly | Thr | Pro | Glu | Tyr | Leu | Ala | Pro | Glu | Val | Leu | Arg | Lys | Glu |
| | | | | | 210 | | | 215 | | | 220 | | | | |
| Pro | Tyr | Asp | Arg | Ala | Val | Asp | Trp | Trp | Cys | Leu | Gly | Ala | Val | Leu | Tyr |
| | | | | | 225 | | | 230 | | | 235 | | 240 | | |
| Glu | Met | Leu | His | Gly | Leu | Pro | Pro | Phe | Tyr | Ser | Gln | Asp | Val | Ser | Gln |
| | | | | | 245 | | | 250 | | | 255 | | | | |
| Met | Tyr | Glu | Asn | Ile | Leu | His | Gln | Pro | Leu | Gln | Ile | Pro | Gly | Gly | Arg |
| | | | | | 260 | | | 265 | | | 270 | | | | |
| Thr | Val | Ala | Ala | Cys | Asp | Leu | Leu | Gln | Ser | Leu | Leu | His | Lys | Asp | Gln |
| | | | | | 275 | | | 280 | | | 285 | | | | |
| Arg | Gln | Arg | Leu | Gly | Ser | Lys | Ala | Asp | Phe | Leu | Glu | Ile | Lys | Asn | His |
| | | | | | 290 | | | 295 | | | 300 | | | | |
| Val | Phe | Phe | Ser | Pro | Ile | Asn | Trp | Asp | Asp | Leu | Tyr | His | Lys | Arg | Leu |
| | | | | | 305 | | | 310 | | | 315 | | 320 | | |
| Thr | Pro | Pro | Phe | Asn | Pro | Asn | Val | Thr | Gly | Pro | Ala | Asp | Leu | Lys | His |
| | | | | | 325 | | | 330 | | | 335 | | | | |
| Phe | Asp | Pro | Glu | Phe | Thr | Gln | Glu | Ala | Val | Ser | Lys | Ser | Ile | Gly | Cys |
| | | | | | 340 | | | 345 | | | 350 | | | | |
| Thr | Pro | Asp | Thr | Val | Ala | Ser | Ser | Gly | Ala | Ser | Ser | Ala | Phe | Leu | |
| | | | | | 355 | | | 360 | | | 365 | | | | |
| Gly | Phe | Ser | Tyr | Ala | Pro | Glu | Asp | Asp | Asp | Ile | Leu | Asp | Cys | | |
| | | | | | 370 | | | 375 | | | 380 | | 382 | | |

<210> 1110

<211> 535

<212>Amino acid

<213> Homo sapiens

<400> 1110
 Arg Pro Gln Thr Leu Lys Gly His Gln Glu Lys Ile Arg Gln Arg Gln
 1 5 10 15
 Ser Ile Leu Pro Pro Pro Gln Gly Pro Ala Pro Ile Pro Phe Gln His
 20 25 30
 Arg Gly Gly Asp Ser Pro Glu Ala Lys Asn Arg Val Gly Pro Gln Val
 35 40 45
 Pro Leu Ser Glu Pro Gly Phe Arg Arg Arg Glu Ser Gln Glu Glu Pro
 50 55 60
 Arg Ala Val Leu Ala Gln Lys Ile Glu Lys Glu Thr Gln Ile Leu Asn
 65 70 75 80
 Cys Ala Leu Asp Asp Ile Glu Trp Phe Val Ala Arg Leu Gln Lys Ala
 85 90 95
 Ala Glu Ala Phe Lys Gln Leu Asn Gln Arg Lys Lys Gly Lys Lys Lys
 100 105 110
 Gly Lys Lys Ala Pro Ala Glu Gly Val Leu Thr Leu Arg Ala Arg Pro
 115 120 125
 Pro Ser Glu Gly Glu Phe Ile Asp Cys Phe Gln Lys Ile Lys Leu Ala
 130 135 140
 Ile Asn Leu Leu Ala Lys Leu Gln Lys His Ile Gln Asn Pro Ser Ala
 145 150 155 160
 Ala Glu Leu Val His Phe Leu Phe Gly Pro Leu Asp Leu Ile Val Asn
 165 170 175
 Thr Cys Ser Gly Pro Asp Ile Ala Arg Ser Val Ser Cys Pro Leu Leu
 180 185 190
 Ser Arg Asp Ala Val Asp Phe Leu Arg Gly His Leu Val Pro Lys Glu
 195 200 205
 Met Ser Leu Trp Glu Ser Leu Gly Glu Ser Trp Met Arg Pro Arg Ser
 210 215 220
 Glu Trp Pro Arg Glu Pro Gln Val Pro Leu Tyr Val Pro Lys Phe His
 225 230 235 240
 Ser Gly Trp Glu Pro Pro Val Asp Val Leu Gln Glu Ala Pro Trp Glu
 245 250 255
 Val Glu Gly Leu Ala Ser Ala Pro Ile-Glu Glu Val Ser Pro Val Ser
 260 265 270
 Arg Gln Ser Ile Arg Asn Ser Gln Lys His Ser Pro Thr Ser Glu Pro
 275 280 285
 Thr Pro Pro Gly Asp Ala Leu Pro Pro Val Ser Ser Pro His Thr His
 290 295 300
 Arg Gly Tyr Gln Pro Thr Pro Ala Met Ala Lys Tyr Val Lys Ile Leu
 305 310 315 320
 Tyr Asp Phe Thr Ala Arg Asn Ala Asn Glu Leu Ser Val Leu Lys Asp
 325 330 335
 Glu Val Leu Glu Val Leu Glu Asp Gly Arg Gln Trp Trp Lys Leu Arg
 340 345 350
 Ser Arg Ser Gly Gln Ala Gly Tyr Val Pro Cys Asn Ile Leu Gly Glu
 355 360 365
 Ala Arg Pro Glu Asp Ala Gly Ala Pro Phe Glu Gln Ala Gly Gln Lys
 370 375 380
 Tyr Trp Gly Pro Ala Ser Pro Thr His Lys Leu Pro Pro Ser Phe Pro
 385 390 395 400
 Gly Asn Lys Asp Glu Leu Met Gln His Met Asp Glu Val Asn Asp Glu
 405 410 415
 Leu Ile Arg Lys Ile Ser Asn Ile Arg Ala Gln Pro Gln Arg His Phe
 420 425 430
 Arg Val Glu Arg Ser Gln Pro Val Ser Gln Pro Leu Thr Tyr Glu Ser
 435 440 445
 Gly Pro Asp Glu Val Arg Ala Trp Leu Glu Ala Lys Ala Phe Ser Pro
 450 455 460
 Arg Ile Val Glu Asn Leu Gly Ile Leu Thr Gly Pro Gln Leu Phe Ser
 465 470 475 480
 Leu Asn Lys Glu Glu Leu Lys Lys Val Cys Gly Glu Glu Gly Val Arg
 485 490 495
 Val Tyr Ser Gln Leu Thr Met Gln Lys Ala Phe Leu Glu Lys Gln Gln

| | | |
|---|-----|-----|
| 500 | 505 | 510 |
| Ser Gly Ser Glu Leu Glu Glu Leu Met Asn Lys Phe His Ser Met Asn | | |
| 515 | 520 | 525 |
| Gln Arg Arg Gly Glu Asp Ser | | |
| 530 | 535 | |

<210> 1111
<211> 346
<212> Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(346)
<223> X = any amino acid or stop code

| | | |
|---|-----|-----|
| <400> 1111 | | |
| Ala Trp His Glu Gly Leu Val Ser Ser Pro Ala Ile Gly Ala Tyr Leu | | |
| 1 | 5 | 10 |
| Ser Ala Ser Tyr Gly Asp Ser Leu Val Val Leu Val Ala Thr Val Val | | |
| 20 | 25 | 30 |
| Ala Leu Leu Asp Ile Cys Phe Ile Leu Val Ala Val Pro Glu Ser Leu | | |
| 35 | 40 | 45 |
| Pro Glu Lys Met Arg Pro Val Ser Trp Gly Ala Gln Ile Ser Trp Lys | | |
| 50 | 55 | 60 |
| Gln Ala Asp Pro Phe Ala Ser Leu Lys Lys Val Gly Lys Asp Ser Thr | | |
| 65 | 70 | 75 |
| Val Leu Leu Ile Cys Ile Thr Val Cys Leu Ser Tyr Leu Pro Glu Ala | | |
| 85 | 90 | 95 |
| Gly Gln Tyr Ser Ser Phe Phe Leu Tyr Leu Arg Gln Val Ile Gly Phe | | |
| 100 | 105 | 110 |
| Gly Ser Val Lys Ile Ala Ala Phe Ile Ala Met Val Gly Ile Leu Ser | | |
| 115 | 120 | 125 |
| Ile Val Ala Gln Thr Ala Phe Leu Ser Ile Leu Met Arg Ser Leu Gly | | |
| 130 | 135 | 140 |
| Asn Lys Asn Thr Val Leu Leu Gly Leu Gly Phe Gln Met Leu Gln Leu | | |
| 145 | 150 | 155 |
| Ala Trp Tyr Gly Phe Gly Ser Gln Ala Trp Met Met Trp Ala Ala Gly | | |
| 165 | 170 | 175 |
| Thr Val Ala Ala Met Ser Ser Ile Thr Phe Pro Ala Ile Ser Ala Leu | | |
| 180 | 185 | 190 |
| Val Ser Arg Asn Ala Glu Ser Asp Gln Gln Gly Val Ala Gln Gly Ile | | |
| 195 | 200 | 205 |
| Ile Thr Gly Ile Arg Gly Leu Cys Asn Gly Leu Gly Pro Ala Leu Tyr | | |
| 210 | 215 | 220 |
| Gly Phe Ile Phe Tyr Met Phe His Val Glu Leu Thr Glu Leu Gly Pro | | |
| 225 | 230 | 235 |
| Lys Leu Asn Ser Asn Asn Val Pro Leu Gln Gly Ala Val Ile Pro Gly | | |
| 245 | 250 | 255 |
| Pro Pro Phe Leu Phe Gly Ala Cys Ile Val Leu Met Ser Phe Leu Ala | | |
| 260 | 265 | 270 |
| Ala Leu Phe Ile Pro Glu Tyr Ser Lys Ala Ser Gly Val Gln Lys His | | |
| 275 | 280 | 285 |
| Ser Asn Ser Ser Ser Gly Ser Leu Thr Asn Thr Pro Glu Arg Gly Ser | | |
| 290 | 295 | 300 |
| Asp Glu Asp Ile Glu Pro Leu Leu Gln Asp Ser Ser Ile Trp Glu Leu | | |
| 305 | 310 | 315 |
| Ser Ser Phe Glu Glu Pro Gly Asn Gln Cys Thr Glu Leu Xaa Thr Arg | | |
| 325 | 330 | 335 |

Gln Lys Val Gly Phe Cys Ile Arg His Leu
 340 345 346

<210> 1112
<211> 647
<212>Amino acid
<213> Homo sapiens

<400> 1112
Met Ala Ala Gly Leu Ala Thr Trp Leu Pro Phe Ala Arg Ala Ala Ala
 1 5 10 15
Val Gly Trp Leu Pro Leu Ala Gln Pro Leu Pro Pro Ala Pro Gly
 20 25 30
Val Lys Ala Ser Arg Gly Asp Glu Val Leu Val Val Asn Val Ser Gly
 35 40 45
Arg Arg Phe Glu Thr Trp Lys Asn Thr Leu Asp Arg Tyr Pro Asp Thr
 50 55 60
Leu Leu Gly Ser Ser Glu Lys Glu Phe Phe Tyr Asp Ala Asp Ser Gly
 65 70 75 80
Glu Tyr Phe Phe Asp Arg Asp Pro Asp Met Phe Arg His Val Leu Asn
 85 90 95
Phe Tyr Arg Thr Gly Arg Leu His Cys Pro Arg Gln Glu Cys Ile Gln
 100 105 110
Ala Phe Asp Glu Glu Leu Ala Phe Tyr Gly Leu Val Pro Glu Leu Val
 115 120 125
Gly Asp Cys Cys Leu Glu Glu Tyr Arg Asp Arg Lys Lys Glu Asn Ala
 130 135 140
Glu Arg Leu Ala Glu Asp Glu Glu Ala Glu Gln Ala Gly Asp Gly Pro
 145 150 155 160
Ala Leu Pro Ala Gly Ser Ser Leu Arg Gln Arg Leu Trp Arg Ala Phe
 165 170 175
Glu Asn Pro His Thr Ser Thr Ala Ala Leu Val Phe Tyr Tyr Val Thr
 180 185 190
Gly Phe Phe Ile Ala Val Ser Val Ile Ala Asn Val Val Glu Thr Ile
 195 200 205
Pro Cys Arg Gly Ser Ala Arg Arg Ser Ser Arg Glu Gln Pro Cys Gly
 210 215 220
Glu Arg Phe Pro Gln Ala Phe Phe Cys Met Asp Thr Ala Cys Val Leu
 225 230 235 240
Ile Phe Thr Gly Glu Tyr Leu Leu Arg Leu Phe Ala Ala Pro Ser Arg
 245 250 255
Cys Arg Phe Leu Arg Ser Val Met Ser Leu Ile Asp Val Val Ala Ile
 260 265 270
Leu Pro Tyr Tyr Ile Gly Leu Leu Val Pro Lys Asn Asp Asp Val Ser
 275 280 285
Gly Ala Phe Val Thr Leu Arg Val Phe Arg Val Phe Arg Ile Phe Lys
 290 295 300
Phe Ser Arg His Ser Gln Gly Leu Arg Ile Leu Gly Tyr Thr Leu Lys
 305 310 315 320
Ser Cys Ala Ser Glu Leu Gly Phe Leu Leu Phe Ser Leu Thr Met Ala
 325 330 335
Ile Ile Ile Phe Ala Thr Val Met Phe Tyr Ala Glu Lys Gly Thr Asn
 340 345 350
Lys Thr Asn Phe Thr Ser Ile Pro Ala Ala Phe Trp Tyr Thr Ile Val
 355 360 365
Thr Met Thr Thr Leu Gly Tyr Gly Asp Met Val Pro Ser Thr Ile Ala
 370 375 380
Gly Lys Ile Phe Gly Ser Ile Cys Ser Leu Ser Gly Val Leu Val Ile
 385 390 395 400

Ala Leu Pro Val Pro Val Ile Val Ser Asn Phe Ser Arg Ile Tyr His
 405 410 415
 Gln Asn Gln Arg Ala Asp Lys Arg Arg Ala Gln Gln Lys Val Arg Leu
 420 425 430
 Ala Arg Ile Arg Leu Ala Lys Ser Gly Thr Thr Asn Ala Phe Leu Gln
 435 440 445
 Tyr Lys Gln Asn Gly Gly Leu Glu Asp Ser Gly Ser Gly Glu Glu Gln
 450 455 460
 Ala Val Cys Val Arg Asn Arg Ser Ala Phe Glu Gln Gln His His His
 465 470 475 480
 Leu Leu His Cys Leu Glu Lys Thr Thr Cys His Glu Phe Thr Asp Glu
 485 490 495
 Leu Thr Phe Ser Glu Ala Leu Gly Ala Val Ser Pro Gly Gly Arg Thr
 500 505 510
 Ser Arg Ser Thr Ser Val Ser Ser Gln Pro Val Gly Pro Gly Ser Leu
 515 520 525
 Leu Ser Ser Cys Cys Pro Arg Arg Ala Lys Arg Arg Ala Ile Arg Leu
 530 535 540
 Ala Asn Ser Thr Ala Ser Val Ser Arg Gly Ser Met Gln Glu Leu Asp
 545 550 555 560
 Met Leu Ala Gly Leu Arg Arg Ser His Ala Pro Gln Ser Arg Ser Ser
 565 570 575
 Leu Asn Ala Lys Pro His Asp Ser Leu Asp Leu Asn Cys Asp Ser Gly
 580 585 590
 Asp Phe Val Ala Ala Ile Ile Ser Ile Pro Thr Pro Pro Ala Asn Thr
 595 600 605
 Pro Asp Glu Ser Gln Pro Ser Ser Pro Gly Gly Gly Arg Ala Gly
 610 615 620
 Ser Thr Leu Arg Asn Ser Ser Leu Gly Thr Pro Cys Leu Phe Pro Glu
 625 630 635 640
 Thr Val Lys Ile Ser Ser Leu
 645 647

<210> 1113
 <211> 220
 <212> Amino acid
 <213> Homo sapiens

 <220>
 <221> misc_feature
 <222> (1)...(220)
 <223> X = any amino acid or stop code

<400> 1113
 Gly Trp Gly Lys Pro Phe Lys Asp Trp Thr Thr Gly Gly Gln Asp Thr
 1 5 10 15
 Gly Gly Glu Pro Ala Leu Leu Val Gly Ala Gly Glu Gly Arg Ala Pro
 20 25 30
 Arg Leu Asn Cys Pro Ser Gly Gln Ile Arg Ser Pro Gly Pro Gly Asp
 35 40 45
 Leu Ser Ile Tyr Asp Asn Trp Ile Arg Tyr Phe Asn Arg Ser Ser Pro
 50 55 60
 Val Tyr Gly Leu Val Pro Arg Ser Lys Thr Ser Ala Arg Ile Tyr Pro
 65 70 75 80
 Thr Tyr His Thr Ala Phe Asp Thr Phe Asp Tyr Val Asp Lys Phe Leu
 85 90 95
 Asp Pro Gly Glu Glu Gly Asp Lys Gly His Pro Glu Thr Arg Thr Gly
 100 105 110
 Glu Ala Glu Asp Xaa Ala Leu Ala Leu Ser Pro Cys Arg Arg Phe Ser

| | | |
|---|-----|-----|
| 115 | 120 | 125 |
| Ser His Gln Ala Val Ala Arg Thr Ala Gly Ser Val Ile Leu Arg Leu | | |
| 130 | 135 | 140 |
| Ser Asp Ser Phe Phe Leu Pro Leu Lys Val Ser Asp Tyr Ser Glu Thr | | |
| 145 | 150 | 155 |
| Leu Arg Ser Phe Leu Gln Ala Ala Gln Gln Asp Leu Gly Ala Leu Leu | | |
| 165 | 170 | 175 |
| Glu Gln His Ser Ile Ser Leu Gly Pro Leu Val Thr Ala Val Glu Lys | | |
| 180 | 185 | 190 |
| Phe Glu Ala Glu Ala Ala Ala Leu Gly Gln Arg Ile Ser Thr Leu Gln | | |
| 195 | 200 | 205 |
| Lys Gly Ser Pro Asp Pro Leu Gln Val Arg Met Leu | | |
| 210 | 215 | 220 |

<210> 1114
<211> 382
<212>Amino acid
<213> Homo sapiens

| | | |
|---|-----|-----|
| <400> 1114 | | |
| Gly Ile Arg Gly Gly Gly Ser Leu Ala Ser Gly Gly Pro Gly Pro Gly | | |
| 1 | 5 | 10 |
| His Ala Ser Leu Ser Gln Arg Leu Arg Leu Tyr Leu Ala Asp Ser Trp | | |
| 20 | 25 | 30 |
| Asn Gln Cys Asp Leu Val Ala Leu Thr Cys Phe Leu Leu Gly Val Gly | | |
| 35 | 40 | 45 |
| Cys Arg Leu Thr Pro Gly Leu Tyr His Leu Gly Arg Thr Val Leu Cys | | |
| 50 | 55 | 60 |
| Ile Asp Phe Met Val Phe Val Arg Leu Leu His Ile Phe Thr Val | | |
| 65 | 70 | 75 |
| Asn Lys Gln Leu Gly Pro Lys Ile Val Ile Val Ser Lys Met Met Lys | | |
| 85 | 90 | 95 |
| Asp Val Phe Phe Leu Phe Phe Leu Gly Val Trp Leu Val Ala Tyr | | |
| 100 | 105 | 110 |
| Gly Val Ala Thr Glu Gly Leu Leu Arg Pro Arg Asp Ser Asp Phe Pro | | |
| 115 | 120 | 125 |
| Ser Ile Leu Arg Arg Val Phe Tyr Arg Pro Tyr Leu Gln Ile Phe Gly | | |
| 130 | 135 | 140 |
| Gln Ile Pro Gln Glu Asp Met Asp Val Ala Leu Met Glu His Ser Asn | | |
| 145 | 150 | 155 |
| Cys Ser Ser Glu Pro Gly Phe Trp Ala His Pro Pro Gly Ala Gln Ala | | |
| 165 | 170 | 175 |
| Gly Thr Cys Val Ser Gln Tyr Ala Asn Trp Leu Val Val Leu Leu | | |
| 180 | 185 | 190 |
| Val Ile Phe Leu Leu Val Ala Asn Ile Leu Leu Val Asn Leu Leu Ile | | |
| 195 | 200 | 205 |
| Ala Met Phe Ser Tyr Thr Phe Gly Lys Val Gln Gly Asn Ser Asp Leu | | |
| 210 | 215 | 220 |
| Tyr Trp Lys Ala Gln Arg Tyr Arg Leu Ile Arg Glu Phe His Ser Arg | | |
| 225 | 230 | 235 |
| Pro Ala Leu Ala Pro Pro Phe Ile Val Ile Ser His Leu Arg Leu Leu | | |
| 245 | 250 | 255 |
| Leu Arg Gln Leu Cys Arg Arg Pro Arg Ser Pro Gln Pro Ser Ser Pro | | |
| 260 | 265 | 270 |
| Ala Leu Glu His Phe Arg Val Tyr Leu Ser Lys Glu Ala Glu Arg Lys | | |
| 275 | 280 | 285 |
| Leu Leu Thr Trp Glu Ser Val His Lys Glu Asn Phe Leu Leu Ala Arg | | |
| 290 | 295 | 300 |
| Ala Arg Asp Lys Arg Glu Ser Asp Ser Glu Arg Leu Lys Arg Thr Ser | | |

| | | | |
|---|-----|-----|-----|
| 305 | 310 | 315 | 320 |
| Gln Lys Val Asp Leu Ala Leu Lys Gln Leu Gly His Ile Arg Glu Tyr | | | |
| 325 | 330 | 335 | |
| Glu Gln Arg Leu Lys Val Leu Glu Arg Glu Val Gln Gln Cys Ser Arg | | | |
| 340 | 345 | 350 | |
| Val Leu Gly Trp Val Ala Glu Ala Leu Ser Arg Ser Ala Leu Leu Pro | | | |
| 355 | 360 | 365 | |
| Pro Gly Gly Pro Pro Pro Asp Leu Pro Gly Ser Lys Asp | | | |
| 370 | 375 | 380 | 382 |

<210> 1115
<211> 109
<212>Amino acid
<213> Homo sapiens

| | | | |
|---|-----|-----|----|
| <400> 1115 | | | |
| Leu Ile Lys Leu Cys Lys Ser Lys Ala Lys Ser Cys Glu Asn Asp Leu | | | |
| 1 | 5 | 10 | 15 |
| Glu Met Gly Met Leu Asn Ser Lys Phe Lys Lys Thr Arg Tyr Gln Ala | | | |
| 20 | 25 | 30 | |
| Gly Met Arg Asn Ser Glu Asn Leu Thr Ala Asn Asn Thr Leu Ser Lys | | | |
| 35 | 40 | 45 | |
| Pro Thr Arg Tyr Gln Gly Glu Leu Lys Glu Ile Lys Gln Asp Ile Ser | | | |
| 50 | 55 | 60 | |
| Ser Leu Arg Tyr Glu Leu Leu Glu Lys Ser Gln Ala Thr Gly Glu | | | |
| 65 | 70 | 75 | 80 |
| Leu Ala Asp Leu Ile Gln Gln Leu Ser Glu Lys Phe Gly Lys Asn Leu | | | |
| 85 | 90 | 95 | |
| Asn Lys Asp His Leu Arg Val Asn Lys Gly Lys Asp Ile | | | |
| 100 | 105 | 109 | |

<210> 1116
<211> 679
<212>Amino acid
<213> Homo sapiens

| | | | |
|---|-----|-----|----|
| <400> 1116 | | | |
| Leu Pro Leu Leu His Ala Gly Phe Asn Arg Arg Phe Met Glu Asn Ser | | | |
| 1 | 5 | 10 | 15 |
| Ser Ile Ile Ala Cys Tyr Asn Glu Leu Ile Gln Ile Glu His Gly Glu | | | |
| 20 | 25 | 30 | |
| Val Arg Ser Gln Phe Lys Leu Arg Ala Cys Asn Ser Val Phe Thr Ala | | | |
| 35 | 40 | 45 | |
| Leu Asp His Cys His Glu Ala Ile Glu Ile Thr Ser Asp Asp His Val | | | |
| 50 | 55 | 60 | |
| Ile Gln Tyr Val Asn Pro Ala Phe Glu Arg Met Met Gly Tyr His Lys | | | |
| 65 | 70 | 75 | 80 |
| Gly Glu Leu Leu Gly Lys Glu Leu Ala Asp Leu Pro Lys Ser Asp Lys | | | |
| 85 | 90 | 95 | |
| Asn Arg Ala Asp Leu Leu Asp Thr Ile Asn Thr Cys Ile Lys Lys Gly | | | |
| 100 | 105 | 110 | |
| Lys Glu Trp Gln Gly Val Tyr Tyr Ala Arg Arg Lys Ser Gly Asp Ser | | | |
| 115 | 120 | 125 | |
| Ile Gln Gln His Val Lys Ile Thr Pro Val Ile Gly Gln Gly Gly Lys | | | |

| | | |
|---|-----|-----|
| 130 | 135 | 140 |
| Ile Arg His Phe Val Ser Leu Lys Lys Leu Cys Cys Thr Thr Asp Asn | | |
| 145 | 150 | 155 |
| Asn Lys Gln Ile His Lys Ile His Arg Asp Ser Gly Asp Asn Ser Gln | | 160 |
| 165 | 170 | 175 |
| Thr Glu Pro His Ser Phe Arg Tyr Lys Asn Arg Arg Lys Glu Ser Ile | | |
| 180 | 185 | 190 |
| Asp Val Lys Ser Ile Ser Ser Arg Gly Ser Asp Ala Pro Ser Leu Gln | | |
| 195 | 200 | 205 |
| Asn Arg Arg Tyr Pro Ser Met Ala Arg Ile His Ser Met Thr Ile Gln | | |
| 210 | 215 | 220 |
| Ala Pro Ile Thr Lys Val Ile Asn Ile Ile Asn Ala Ala Gln Glu Asn | | |
| 225 | 230 | 235 |
| Ser Pro Val Thr Val Ala Glu Ala Leu Asp Arg Val Leu Glu Ile Leu | | 240 |
| 245 | 250 | 255 |
| Arg Thr Thr Glu Leu Tyr Ser Pro Gln Leu Gly Thr Lys Asp Glu Asp | | |
| 260 | 265 | 270 |
| Pro His Thr Ser Asp Leu Val Gly Gly Leu Met Thr Asp Gly Leu Arg | | |
| 275 | 280 | 285 |
| Arg Leu Ser Gly Asn Glu Tyr Val Phe Thr Lys Asn Val His Gln Ser | | |
| 290 | 295 | 300 |
| His Ser His Leu Ala Met Pro Ile Thr Ile Asn Asp Val Pro Pro Cys | | |
| 305 | 310 | 315 |
| Ile Ser Gln Leu Leu Asp Asn Glu Glu Ser Trp Asp Phe Asn Ile Phe | | 320 |
| 325 | 330 | 335 |
| Glu Leu Glu Ala Ile Thr His Lys Arg Pro Leu Val Tyr Leu Gly Leu | | |
| 340 | 345 | 350 |
| Lys Val Phe Ser Arg Phe Gly Val Cys Glu Phe Leu Asn Cys Ser Glu | | |
| 355 | 360 | 365 |
| Thr Thr Leu Arg Ala Trp Phe Gln Val Ile Glu Ala Asn Tyr His Ser | | |
| 370 | 375 | 380 |
| Ser Asn Ala Tyr His Asn Ser Thr His Ala Ala Asp Val Leu His Ala | | |
| 385 | 390 | 395 |
| Thr Ala Phe Phe Leu Gly Lys Glu Arg Val Lys Gly Ser Leu Asp Gln | | 400 |
| 405 | 410 | 415 |
| Leu Asp Glu Val Ala Ala Leu Ile Ala Ala Thr Val His Asp Val Asp | | |
| 420 | 425 | 430 |
| His Pro Gly Arg Thr Asn Ser Phe Leu Cys Asn Ala Gly Ser Glu Leu | | |
| 435 | 440 | 445 |
| Ala Val Leu Tyr Asn Asp Thr Ala Val Leu Glu Ser His His Thr Ala | | |
| 450 | 455 | 460 |
| Leu Ala Phe Gln Leu Thr Val Lys Asp Thr Lys Cys Asn Ile Phe Lys | | |
| 465 | 470 | 475 |
| Asn Ile Asp Arg Gly Asn His Tyr Arg Thr Leu Arg Gln Ala Ile Ile | | 480 |
| 485 | 490 | 495 |
| Asp Met Val Leu Ala Thr Glu Met Thr Lys His Phe Glu His Val Asn | | |
| 500 | 505 | 510 |
| Lys Phe Val Asn Ser Ile Asn Lys Pro Met Ala Ala Glu Ile Glu Gly | | |
| 515 | 520 | 525 |
| Ser Asp Cys Glu Cys Asn Pro Ala Gly Lys Asn Phe Pro Glu Asn Gln | | |
| 530 | 535 | 540 |
| Ile Leu Ile Lys Arg Met Met Ile Lys Cys Ala Asp Val Ala Asn Pro | | |
| 545 | 550 | 555 |
| Cys Arg Pro Leu Asp Leu Cys Ile Glu Trp Ala Gly Arg Ile Ser Glu | | 560 |
| 565 | 570 | 575 |
| Glu Tyr Phe Ala Gln Thr Asp Glu Glu Lys Arg Gln Gly Leu Pro Val | | |
| 580 | 585 | 590 |
| Val Met Pro Val Phe Asp Arg Asn Thr Cys Ser Ile Pro Lys Ser Gln | | |
| 595 | 600 | 605 |
| Ile Ser Phe Ile Asp Tyr Phe Ile Thr Asp Met Phe Asp Ala Trp Asp | | |
| 610 | 615 | 620 |
| Ala Phe Ala His Leu Pro Ala Leu Met Gln His Leu Ala Asp Asn Tyr | | |
| 625 | 630 | 635 |
| Lys His Trp Lys Thr Leu Asp Asp Leu Lys Cys Lys Ser Leu Arg Leu | | 640 |

| | | |
|---|-----|-----|
| 645 | 650 | 655 |
| Pro Ser Asp Arg Leu Lys Pro Ser His Arg Gly Gly Leu Leu Thr Asp | | |
| 660 | 665 | 670 |
| Lys Gly His Cys Glu Ser Gln | | |
| 675 | 679 | |

<210> 1117
<211> 1193
<212>Amino acid
<213> Homo sapiens

| | | |
|---|-----|----|
| <400> 1117 | | |
| Ala Phe Leu Ser Lys Val Glu Glu Asp Asp Tyr Pro Ser Glu Glu Leu | 10 | 15 |
| 1 | 5 | |
| Leu Glu Asp Glu Asn Ala Ile Asn Ala Lys Arg Ser Lys Glu Lys Asn | 25 | 30 |
| 20 | | |
| Pro Gly Asn Gln Gly Arg Gln Phe Asp Val Asn Leu Gln Val Pro Asp | 45 | |
| 35 | 40 | |
| Arg Ala Val Leu Gly Thr Ile His Pro Asp Pro Glu Ile Glu Glu Ser | 60 | |
| 50 | 55 | |
| Lys Gln Glu Thr Ser Met Ile Leu Asp Ser Glu Lys Thr Ser Glu Thr | 80 | |
| 65 | 70 | |
| Ala Ala Lys Gly Val Asn Thr Gly Gly Arg Glu Pro Asn Thr Met Val | 95 | |
| 85 | 90 | |
| Glu Lys Glu Arg Pro Leu Ala Asp Lys Lys Ala Gln Arg Pro Phe Glu | 110 | |
| 100 | 105 | |
| Arg Ser Asp Phe Ser Asp Ser Ile Lys Ile Gln Thr Pro Glu Leu Gly | 125 | |
| 115 | 120 | |
| Glu Val Phe Gln Asn Lys Asp Ser Asp Tyr Leu Lys Asn Asp Asn Pro | 140 | |
| 130 | 135 | |
| Glu Glu His Leu Lys Thr Ser Gly Leu Ala Gly Glu Pro Glu Gly Glu | 160 | |
| 145 | 150 | |
| Leu Ser Lys Glu Asp His Glu Asn Thr Glu Lys Tyr Met Gly Thr Glu | 175 | |
| 165 | 170 | |
| Ser Gln Gly Ser Ala Ala Ala Glu Pro Glu Asp Asp Ser Phe His Trp | 190 | |
| 180 | 185 | |
| Thr Pro His Thr Ser Val Glu Pro Gly His Ser Asp Lys Arg Glu Asp | 205 | |
| 195 | 200 | |
| Leu Leu Ile Ile Ser Ser Phe Phe Lys Glu Gln Ser Leu Gln Arg | 220 | |
| 210 | 215 | |
| Phe Gln Lys Tyr Phe Asn Val His Glu Leu Glu Ala Leu Leu Gln Glu | 240 | |
| 225 | 230 | |
| Met Ser Ser Lys Leu Lys Ser Ala Gln Gln Glu Ser Leu Pro Tyr Asn | 255 | |
| 245 | 250 | |
| Met Glu Lys Val Leu Asp Lys Val Phe Arg Ala Ser Glu Ser Gln Ile | 270 | |
| 260 | 265 | |
| Leu Ser Ile Ala Glu Lys Met Leu Asp Thr Arg Val Ala Glu Asn Arg | 285 | |
| 275 | 280 | |
| Asp Leu Gly Met Asn Glu Asn Asn Ile Phe Glu Glu Ala Ala Val Leu | 300 | |
| 290 | 295 | |
| Asp Asp Ile Gln Asp Leu Ile Tyr Phe Val Arg Tyr Lys His Ser Thr | 320 | |
| 305 | 310 | |
| Ala Glu Glu Thr Ala Thr Leu Val Met Ala Pro Pro Leu Glu Glu Gly | 335 | |
| 325 | 330 | |
| Leu Gly Gly Ala Met Glu Glu Met Gln Pro Leu His Glu Asp Asn Phe | 350 | |
| 340 | 345 | |
| Ser Arg Glu Lys Thr Ala Glu Leu Asn Val Gln Val Pro Glu Glu Pro | 365 | |
| 355 | 360 | |
| Thr His Leu Asp Gln Arg Val Ile Gly Asp Thr His Ala Ser Glu Val | | |

| | | |
|---|-----|-----|
| 370 | 375 | 380 |
| Ser Gln Lys Pro Asn Thr Glu Lys Asp Leu Asp Pro Gly Pro Val Thr | 385 | 390 |
| 395 | 400 | |
| Thr Glu Asp Thr Pro Met Asp Ala Ile Asp Ala Asn Lys Gln Pro Glu | 405 | 410 |
| 415 | | |
| Thr Ala Ala Glu Glu Pro Ala Ser Val Thr Pro Leu Glu Asn Ala Ile | 420 | 425 |
| 430 | | |
| Leu Leu Ile Tyr Ser Phe Met Phe Tyr Leu Thr Lys Ser Leu Val Ala | 435 | 440 |
| 445 | | |
| Thr Leu Pro Asp Asp Val Gln Pro Gly Pro Asp Phe Tyr Gly Leu Pro | 450 | 455 |
| 460 | | |
| Trp Lys Pro Val Phe Ile Thr Ala Phe Leu Gly Ile Ala Ser Phe Ala | 465 | 470 |
| 475 | 480 | |
| Ile Phe Leu Trp Arg Thr Val Leu Val Val Lys Asp Arg Val Tyr Gln | 485 | 490 |
| 495 | | |
| Val Thr Glu Gln Gln Ile Ser Glu Lys Leu Lys Thr Ile Met Lys Glu | 500 | 505 |
| 510 | | |
| Asn Thr Glu Leu Val Gln Lys Leu Ser Asn Tyr Glu Gln Lys Ile Lys | 515 | 520 |
| 525 | | |
| Glu Ser Lys Lys His Val Gln Glu Thr Arg Lys Gln Asn Met Ile Leu | 530 | 535 |
| 540 | | |
| Ser Asp Glu Ala Ile Lys Tyr Lys Asp Lys Ile Lys Thr Leu Glu Lys | 545 | 550 |
| 555 | 560 | |
| Asn Gln Glu Ile Leu Asp Asp Thr Ala Lys Asn Leu Arg Val Met Leu | 565 | 570 |
| 575 | | |
| Glu Ser Glu Arg Gln Asn Val Lys Asn Gln Asp Leu Ile Ser Glu | 580 | 585 |
| 590 | | |
| Asn Lys Ser Ile Glu Lys Leu Lys Asp Val Ile Ser Met Asn Ala | 595 | 600 |
| 605 | | |
| Ser Glu Phe Ser Glu Val Gln Ile Ala Leu Asn Glu Ala Lys Leu Ser | 610 | 615 |
| 620 | | |
| Glu Glu Lys Val Lys Ser Glu Cys His Arg Val Gln Glu Glu Asn Ala | 625 | 630 |
| 635 | 640 | |
| Arg Leu Lys Lys Lys Glu Gln Leu Gln Gln Glu Ile Glu Asp Trp | 645 | 650 |
| 655 | | |
| Ser Lys Leu His Ala Glu Leu Ser Glu Gln Ile Lys Ser Phe Glu Lys | 660 | 665 |
| 670 | | |
| Ser Gln Lys Asp Leu Glu Val Ala Leu Thr His Lys Asp Asp Asn Ile | 675 | 680 |
| 685 | | |
| Asn Ala Leu Thr Asn Cys Ile Thr Gln Leu Asn Ile Leu Glu Cys Glu | 690 | 695 |
| 700 | | |
| Ser Glu Ser Glu Gly Gln Asn Lys Gly Gly Asn Asp Ser Asp Glu Leu | 705 | 710 |
| 715 | 720 | |
| Ala Asn Gly Glu Val Gly Gly Asp Arg Asn Glu Lys Met Lys Asn Gln | 725 | 730 |
| 735 | | |
| Ile Lys Gln Met Met Asp Val Ser Arg Thr Gln Thr Ala Ile Ser Val | 740 | 745 |
| 750 | | |
| Val Glu Glu Asp Leu Lys Leu Leu Gln Leu Lys Leu Arg Ala Ser Val | 755 | 760 |
| 765 | | |
| Ser Thr Lys Cys Asn Leu Glu Asp Gln Val Lys Lys Leu Glu Asp Asp | 770 | 775 |
| 780 | | |
| Arg Asn Ser Leu Gln Ala Ala Lys Ala Gly Leu Glu Asp Glu Cys Lys | 785 | 790 |
| 795 | 800 | |
| Thr Leu Arg Gln Lys Val Glu Ile Leu Asn Glu Leu Tyr Gln Gln Lys | 805 | 810 |
| 815 | | |
| Glu Met Ala Leu Gln Lys Lys Leu Ser Gln Glu Glu Tyr Glu Arg Gln | 820 | 825 |
| 830 | | |
| Glu Arg Glu His Arg Leu Ser Ala Ala Asp Glu Lys Ala Val Ser Ala | 835 | 840 |
| 845 | | |
| Ala Glu Glu Val Lys Thr Tyr Lys Arg Arg Ile Glu Glu Met Glu Asp | 850 | 855 |
| 860 | | |
| Glu Leu Gln Lys Thr Glu Arg Ser Phe Lys Asn Gln Ile Ala Thr His | 865 | 870 |
| 875 | 880 | |
| Glu Lys Lys Ala His Glu Asn Trp Leu Lys Ala Arg Ala Glu Arg | | |

| | | | |
|---|------|------|------|
| | 885 | 890 | 895 |
| Ala Ile Ala Glu Lys Lys Arg Glu Ala Ala Asn Leu Arg His Lys Leu | 900 | 905 | 910 |
| | | | |
| Leu Asp Leu Thr Gln Lys Met Ala Met Leu Gln Glu Glu Pro Val Ile | 915 | 920 | 925 |
| | | | |
| Val Lys Pro Met Pro Gly Lys Pro Asn Thr Gln Asn Pro Pro Arg Arg | 930 | 935 | 940 |
| | | | |
| Gly Pro Leu Ser Gln Asn Gly Ser Phe Gly Pro Ser Pro Val Ser Gly | 945 | 950 | 955 |
| | | | |
| Gly Glu Cys Ser Pro Pro Leu Thr Val Glu Pro Pro Val Arg Pro Leu | 965 | 970 | 975 |
| | | | |
| Ser Ala Thr Leu Asn Arg Arg Asp Met Pro Arg Ser Glu Phe Gly Ser | 980 | 985 | 990 |
| | | | |
| Leu Asp Gly Pro Leu Pro His Pro Arg Trp Ser Ala Glu Ala Ser Gly | 995 | 1000 | 1005 |
| | | | |
| Lys Pro Ser Pro Ser Asp Pro Gly Ser Gly Thr Ala Thr Met Met Asn | 1010 | 1015 | 1020 |
| | | | |
| Ser Ser Ser Arg Gly Ser Ser Pro Thr Arg Val Leu Asp Glu Gly Lys | 1025 | 1030 | 1035 |
| | | | |
| Val Asn Met Ala Pro Lys Gly Pro Pro Pro Phe Pro Gly Val Pro Leu | 1045 | 1050 | 1055 |
| | | | |
| Met Ser Thr Pro Met Gly Gly Pro Val Pro Pro Pro Ile Arg Tyr Gly | 1060 | 1065 | 1070 |
| | | | |
| Pro Pro Pro Gln Leu Cys Gly Pro Phe Gly Pro Arg Pro Leu Pro Pro | 1075 | 1080 | 1085 |
| | | | |
| Pro Phe Gly Pro Gly Met Arg Pro Pro Leu Gly Leu Arg Glu Phe Ala | 1090 | 1095 | 1100 |
| | | | |
| Pro Gly Val Pro Pro Gly Arg Arg Asp Leu Pro Leu His Pro Arg Gly | 1105 | 1110 | 1115 |
| | | | |
| Phe Leu Pro Gly His Ala Pro Phe Arg Pro Leu Gly Ser Leu Gly Pro | 1125 | 1130 | 1135 |
| | | | |
| Arg Glu Tyr Phe Ile Pro Gly Thr Arg Leu Pro Pro Pro Thr His Gly | 1140 | 1145 | 1150 |
| | | | |
| Pro Gln Glu Tyr Pro Pro Pro Pro Ala Val Arg Asp Leu Leu Pro Ser | 1155 | 1160 | 1165 |
| | | | |
| Gly Ser Arg Asp Glu Pro Pro Ala Ser Gln Ser Thr Ser Gln Asp | 1170 | 1175 | 1180 |
| | | | |
| Cys Ser Gln Ala Leu Lys Gln Ser Pro | 1185 | 1190 | 1193 |

<210> 1118
 <211> 981
 <212>Amino acid
 <213> Homo sapiens

| | | | |
|---|------------|----|----|
| | <400> 1118 | | |
| Met Ala Ala Asp Ser Glu Pro Glu Ser Glu Val Phe Glu Ile Thr Asp | 1 | 5 | 10 |
| | | | |
| Phe Thr Thr Ala Ser Glu Trp Glu Arg Phe Ile Ser Lys Val Glu Glu | 20 | 25 | 30 |
| | | | |
| Val Leu Asn Asp Trp Lys Leu Ile Gly Asn Ser Leu Gly Lys Pro Leu | 35 | 40 | 45 |
| | | | |
| Glu Lys Gly Ile Phe Thr Ser Gly Thr Trp Glu Glu Lys Ser Asp Glu | 50 | 55 | 60 |
| | | | |
| Ile Ser Phe Ala Asp Phe Lys Phe Ser Val Thr His His Tyr Leu Val | 65 | 70 | 75 |
| | | | |
| Gln Glu Ser Thr Asp Lys Glu Gly Lys Asp Glu Leu Leu Glu Asp Val | 85 | 90 | 95 |
| | | | |
| Val Pro Gln Ser Met Gln Asp Leu Leu Gly Met Asn Asn Asp Phe Pro | | | |

| | | |
|---|-----|-----|
| 100 | 105 | 110 |
| Pro Arg Ala His Cys Leu Val Arg Trp Tyr Gly Leu Arg Glu Phe Val | | |
| 115 | 120 | 125 |
| Val Ile Ala Pro Ala Ala His Ser Asp Ala Val Leu Ser Glu Ser Lys | | |
| 130 | 135 | 140 |
| Cys Asn Leu Leu Ser Ser Val Ser Ile Ala Leu Gly Asn Thr Gly | | |
| 145 | 150 | 155 |
| Cys Gln Val Pro Leu Phe Val Gln Ile His His Lys Trp Arg Arg Met | | 160 |
| 165 | 170 | 175 |
| Tyr Val Gly Cys Gln Gly Pro Gly Val Arg Thr Asp Phe Glu Met | | |
| 180 | 185 | 190 |
| Val His Leu Arg Lys Val Pro Asn Gln Tyr Thr His Leu Ser Gly Leu | | |
| 195 | 200 | 205 |
| Leu Asp Ile Phe Lys Ser Lys Ile Gly Cys Pro Leu Thr Pro Leu Pro | | |
| 210 | 215 | 220 |
| Pro Val Ser Ile Ala Ile Arg Phe Thr Tyr Val Leu Gln Asp Trp Gln | | |
| 225 | 230 | 235 |
| Gln Tyr Phe Trp Pro Gln Gln Pro Pro Asp Ile Asp Ala Leu Val Gly | | 240 |
| 245 | 250 | 255 |
| Gly Glu Val Gly Gly Leu Glu Phe Gly Lys Leu Pro Phe Gly Ala Cys | | |
| 260 | 265 | 270 |
| Glu Asp Pro Ile Ser Glu Leu His Leu Ala Thr Thr Trp Pro His Leu | | |
| 275 | 280 | 285 |
| Thr Glu Gly Ile Ile Val Asp Asn Asp Val Tyr Ser Asp Leu Asp Pro | | |
| 290 | 295 | 300 |
| Ile Gln Ala Pro His Trp Ser Val Arg Val Arg Lys Ala Glu Asn Pro | | |
| 305 | 310 | 315 |
| Gln Cys Leu Leu Gly Asp Phe Val Thr Glu Phe Phe Lys Ile Cys Arg | | 320 |
| 325 | 330 | 335 |
| Arg Lys Glu Ser Thr Asp Glu Ile Leu Gly Arg Ser Ala Phe Glu Glu | | |
| 340 | 345 | 350 |
| Glu Gly Lys Glu Thr Ala Asp Ile Thr His Ala Leu Ser Lys Leu Thr | | |
| 355 | 360 | 365 |
| Glu Pro Ala Ser Val Pro Ile His Lys Leu Ser Val Ser Asn Met Val | | |
| 370 | 375 | 380 |
| His Thr Ala Lys Lys Ile Arg Lys His Arg Gly Val Glu Ser | | |
| 385 | 390 | 395 |
| Pro Leu Asn Asn Asp Val Leu Asn Thr Ile Leu Leu Phe Leu Phe Pro | | 400 |
| 405 | 410 | 415 |
| Asp Ala Val Ser Glu Lys Pro Leu Asp Gly Thr Thr Ser Thr Asp Asn | | |
| 420 | 425 | 430 |
| Asn Asn Pro Pro Ser Glu Ser Glu Asp Tyr Asn Leu Tyr Asn Gln Phe | | |
| 435 | 440 | 445 |
| Lys Ser Ala Pro Ser Asp Ser Leu Thr Tyr Lys Leu Ala Leu Cys Leu | | |
| 450 | 455 | 460 |
| Cys Met Ile Asn Phe Tyr His Gly Gly Leu Lys Gly Val Ala His Leu | | |
| 465 | 470 | 475 |
| Trp Gln Glu Phe Val Leu Glu Met Arg Phe Arg Trp Glu Asn Asn Phe | | 480 |
| 485 | 490 | 495 |
| Leu Ile Pro Gly Leu Ala Ser Gly Pro Pro Asp Leu Arg Cys Cys Leu | | |
| 500 | 505 | 510 |
| Leu His Gln Lys Leu Gln Met Leu Asn Cys Cys Ile Glu Arg Lys Lys | | |
| 515 | 520 | 525 |
| Ala Arg Asp Glu Gly Lys Lys Thr Ser Ala Ser Asp Val Thr Asn Ile | | |
| 530 | 535 | 540 |
| Tyr Pro Gly Asp Ala Gly Lys Ala Gly Asp Gln Leu Val Pro Asp Asn | | |
| 545 | 550 | 555 |
| Leu Lys Glu Thr Asp Lys Glu Lys Gly Glu Val Gly Lys Ser Trp Asp | | 560 |
| 565 | 570 | 575 |
| Ser Trp Ser Asp Ser Glu Glu Glu Phe Phe Glu Cys Leu Ser Asp Thr | | |
| 580 | 585 | 590 |
| Glu Glu Leu Lys Gly Asn Gly Gln Glu Ser Gly Lys Lys Gly Gly Pro | | |
| 595 | 600 | 605 |
| Lys Glu Met Ala Asn Leu Arg Pro Glu Gly Arg Leu Tyr Gln His Gly | | |

| | | | | |
|---|-----|-----|-----|-----|
| 610 | 615 | 620 | | |
| Lys Leu Thr Leu Leu His Asn Gly Glu Pro Leu Tyr Ile Pro Val Thr | 625 | 630 | 635 | 640 |
| Gln Glu Pro Ala Pro Met Thr Glu Asp Leu Leu Glu Glu Gln Ser Glu | 645 | 650 | 655 | |
| Val Leu Ala Lys Leu Gly Thr Ser Ala Glu Gly Ala His Leu Arg Ala | 660 | 665 | 670 | |
| Arg Met Gln Ser Ala Cys Leu Leu Ser Asp Met Glu Ser Phe Lys Ala | 675 | 680 | 685 | |
| Ala Asn Pro Gly Cys Ser Leu Glu Asp Phe Val Arg Trp Tyr Ser Pro | 690 | 695 | 700 | |
| Arg Asp Tyr Ile Glu Glu Glu Val Ile Asp Glu Lys Gly Asn Val Val | 705 | 710 | 715 | 720 |
| Leu Lys Gly Glu Leu Ser Ala Arg Met Lys Ile Pro Ser Asn Met Trp | 725 | 730 | 735 | |
| Val Glu Ala Trp Glu Thr Ala Lys Pro Ile Pro Ala Arg Arg Gln Arg | 740 | 745 | 750 | |
| Arg Leu Phe Asp Asp Thr Arg Glu Ala Glu Lys Val Leu His Tyr Leu | 755 | 760 | 765 | |
| Ala Ile Gln Lys Pro Ala Asp Leu Ala Arg His Leu Leu Pro Cys Val | 770 | 775 | 780 | |
| Ile His Ala Ala Val Leu Lys Val Lys Glu Glu Ser Leu Glu Asn | 785 | 790 | 795 | 800 |
| Ile Ser Ser Val Lys Lys Ile Ile Lys Glu Ile Ile Ser His Ser Ser | 805 | 810 | 815 | |
| Lys Val Leu His Phe Pro Asn Pro Glu Asp Lys Lys Leu Glu Glu Ile | 820 | 825 | 830 | |
| Ile His Gln Ile Thr Asn Val Glu Ala Leu Ile Ala Arg Ala Arg Ser | 835 | 840 | 845 | |
| Leu Lys Ala Lys Phe Gly Thr Glu Lys Cys Glu Gln Glu Glu Lys | 850 | 855 | 860 | |
| Glu Asp Leu Glu Arg Phe Val Ser Cys Leu Leu Glu Gln Pro Glu Val | 865 | 870 | 875 | 880 |
| Leu Val Thr Gly Ala Gly Arg Gly His Ala Gly Arg Ile Ile His Lys | 885 | 890 | 895 | |
| Leu Phe Val Asn Ala Gln Arg Ala Ala Met Thr Pro Pro Glu Glu | 900 | 905 | 910 | |
| Glu Leu Lys Arg Met Gly Ser Pro Glu Glu Arg Arg Gln Asn Ser Val | 915 | 920 | 925 | |
| Ser Asp Phe Pro Pro Pro Ala Gly Arg Glu Phe Ile Leu Arg Thr Thr | 930 | 935 | 940 | |
| Val Pro Arg Pro Ala Pro Tyr Ser Lys Ala Leu Pro Gln Arg Met Tyr | 945 | 950 | 955 | 960 |
| Ser Val Leu Thr Lys Glu Asp Phe Arg Leu Ala Gly Ala Phe Ser Ser | 965 | 970 | 975 | |
| Asp Thr Ser Phe Phe | 980 | 981 | | |

<210> 1119
 <211> 554
 <212>Amino acid
 <213> Homo sapiens

| | | | | |
|---|----|----|----|----|
| <400> 1119 | | | | |
| Ser Pro Thr Arg Thr Gly Asp Arg Ser Val Ser Leu Ile Val Phe Leu | 1 | 5 | 10 | 15 |
| Thr Glu Gly Lys Pro Thr Val Gly Glu Thr His Thr Leu Lys Ile Leu | 20 | 25 | 30 | |
| Asn Asn Thr Arg Glu Ala Ala Arg Gly Gln Val Cys Ile Phe Thr Ile | | | | |

| | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gly | Ile | Gly | Asn | Asp | Val | Asp | Phe | Arg | Leu | Leu | Glu | Lys | Leu | Ser | Leu | |
| 35 | | | | | 40 | | | | | | 45 | | | | | |
| Glu | Asn | Cys | Gly | Leu | Thr | Arg | Arg | Val | His | Glu | Glu | Glu | Asp | Ala | Gly | |
| 50 | | | | | 55 | | | | | 60 | | | | | | |
| Ser | Gln | Leu | Ile | Gly | Phe | Tyr | Asp | Glu | Ile | Arg | Thr | Pro | Leu | Leu | Ser | |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 | |
| Asp | Ile | Arg | Ile | Asp | Tyr | Pro | Pro | Ser | Ser | Val | Val | Gln | Ala | Thr | Lys | |
| 85 | | | | | | | | | | 90 | | | | | 95 | |
| Thr | Leu | Phe | Pro | Asn | Tyr | Pho | Asn | Gly | Ser | Glu | Ile | Ile | Ile | Ala | Gly | |
| 115 | | | | | | | | | 120 | | | | | 125 | | |
| Lys | Leu | Val | Asp | Arg | Lys | Leu | Asp | His | Leu | His | Val | Glu | Val | Thr | Ala | |
| 130 | | | | | | | | | 135 | | | | | 140 | | |
| Ser | Asn | Ser | Lys | Phe | Ile | Ile | Leu | Lys | Thr | Asp | Val | Pro | Val | Arg | | |
| 145 | | | | | | | | | | 155 | | | | | 160 | |
| Pro | Gln | Lys | Ala | Gly | Lys | Asp | Val | Thr | Gly | Ser | Pro | Arg | Pro | Gly | Gly | |
| 165 | | | | | | | | | | 170 | | | | | 175 | |
| Asp | Gly | Glu | Gly | Asp | Thr | Asn | His | Ile | Glu | Arg | Leu | Trp | Ser | Tyr | Leu | |
| 180 | | | | | | | | | 185 | | | | | 190 | | |
| Thr | Thr | Lys | Glu | Leu | Leu | Ser | Ser | Trp | Leu | Gln | Ser | Asp | Asp | Glu | Pro | |
| 195 | | | | | | | | | 200 | | | | | 205 | | |
| Glu | Lys | Glu | Arg | Leu | Arg | Ala | Gln | Ala | Leu | Ala | Leu | Ala | Val | Ser | Tyr | |
| 210 | | | | | | | | | 215 | | | | | 220 | | |
| Arg | Phe | Leu | Thr | Pro | Phe | Thr | Ser | Met | Lys | Leu | Arg | Gly | Pro | Val | Pro | |
| 225 | | | | | | | | | 230 | | | | | 235 | | 240 |
| Arg | Met | Asp | Gly | Leu | Glu | Glu | Ala | His | Gly | Met | Ser | Ala | Ala | Met | Gly | |
| 245 | | | | | | | | | | 250 | | | | | 255 | |
| Pro | Glu | Pro | Val | Val | Gln | Ser | Val | Arg | Gly | Ala | Gly | Thr | Gln | Pro | Gly | |
| 260 | | | | | | | | | 265 | | | | | 270 | | |
| Pro | Leu | Leu | Lys | Lys | Pro | Tyr | Gln | Pro | Arg | Ile | Lys | Ile | Ser | Lys | Thr | |
| 275 | | | | | | | | | 280 | | | | | 285 | | |
| Ser | Val | Asp | Gly | Asp | Pro | His | Phe | Val | Val | Asp | Phe | Pro | Leu | Ser | Arg | |
| 290 | | | | | | | | | 295 | | | | | 300 | | |
| Leu | Thr | Val | Cys | Phe | Asn | Ile | Asp | Gly | Gln | Pro | Gly | Asp | Ile | Leu | Arg | |
| 305 | | | | | | | | | 310 | | | | | 315 | | 320 |
| Leu | Val | Ser | Asp | His | Arg | Asp | Ser | Gly | Val | Thr | Val | Asn | Gly | Glu | Leu | |
| 325 | | | | | | | | | 330 | | | | | 335 | | |
| Ile | Gly | Ala | Pro | Ala | Pro | Pro | Asn | Gly | His | Lys | Lys | Gln | Arg | Thr | Tyr | |
| 340 | | | | | | | | | 345 | | | | | 350 | | |
| Leu | Arg | Thr | Ile | Thr | Ile | Leu | Ile | Asn | Lys | Pro | Glu | Arg | Ser | Tyr | Leu | |
| 355 | | | | | | | | | 360 | | | | | 365 | | |
| Glu | Ile | Thr | Pro | Ser | Arg | Val | Ile | Leu | Asp | Gly | Gly | Asp | Arg | Leu | Val | |
| 370 | | | | | | | | | 375 | | | | | 380 | | |
| Leu | Pro | Cys | Asn | Gln | Ser | Val | Val | Val | Gly | Ser | Trp | Gly | Leu | Glu | Val | |
| 385 | | | | | | | | | 390 | | | | | 395 | | 400 |
| Ser | Val | Ser | Ala | Asn | Ala | Asn | Val | Thr | Val | Thr | Ile | Gln | Gly | Ser | Ile | |
| 405 | | | | | | | | | 410 | | | | | 415 | | |
| Ala | Phe | Val | Ile | Leu | Ile | His | Leu | Tyr | Lys | Lys | Pro | Ala | Pro | Phe | Gln | |
| 420 | | | | | | | | | 425 | | | | | 430 | | |
| Arg | His | His | Leu | Gly | Phe | Tyr | Ile | Ala | Asn | Ser | Glu | Gly | Leu | Ser | Ser | |
| 435 | | | | | | | | | 440 | | | | | 445 | | |
| Asn | Cys | His | Gly | Leu | Leu | Gly | Gln | Phe | Leu | Asn | Gln | Asp | Ala | Arg | Leu | |
| 450 | | | | | | | | | 455 | | | | | 460 | | |
| Thr | Glu | Asp | Pro | Ala | Gly | Pro | Ser | Gln | Asn | Leu | Thr | His | Pro | Leu | Leu | |
| 465 | | | | | | | | | 470 | | | | | 475 | | 480 |
| Leu | Gln | Val | Gly | Glu | Gly | Pro | Glu | Ala | Val | Leu | Thr | Val | Lys | Gly | His | |
| 485 | | | | | | | | | 490 | | | | | 495 | | |
| Gln | Val | Pro | Val | Val | Trp | Lys | Gln | Arg | Lys | Ile | Tyr | Asn | Gly | Glu | Glu | |
| 500 | | | | | | | | | 505 | | | | | 510 | | |
| Gln | Ile | Asp | Cys | Trp | Phe | Ala | Arg | Asn | Ala | Ala | Lys | Leu | Ile | Asp | | |
| 515 | | | | | | | | | 520 | | | | | 525 | | |
| Gly | Glu | Tyr | Lys | Asp | Tyr | Leu | Ala | Ser | His | Pro | Phe | Asp | Thr | Gly | Met | |
| 530 | | | | | | | | | 535 | | | | | 540 | | |
| Thr | Leu | Gly | Gln | Gly | Met | Ser | Arg | Glu | Leu | | | | | | | |

| | | |
|-----|-----|-----|
| 545 | 550 | 554 |
|-----|-----|-----|

<210> 1120
<211> 107
<212>Amino acid
<213> Homo sapiens

<400> 1120
Val Pro Leu Glu Ser Leu Ser Cys Ser His Ala Asp Asn Trp Lys Gln
1 5 10 15
Glu Leu Thr Lys Phe Ile Ser Pro Asp Gln Leu Pro Val Glu Phe Gly
20 25 30
Gly Thr Met Thr Asp Pro Asp Gly Asn Pro Lys Cys Leu Thr Lys Ile
35 40 45
Asn Tyr Gly Gly Glu Val Pro Lys Ser Tyr Tyr Leu Cys Lys Gln Val
50 55 60
Arg Leu Gln Tyr Glu His Thr Arg Ser Val Gly Arg Gly Ser Ser Leu
65 70 75 80
Gln Val Glu Asn Glu Ile Leu Phe Pro Gly Cys Val Leu Arg Cys Pro
85 90 95
Glu Val Leu Gln His Leu Gln Pro Gly Ser Phe
100 105 107

<210> 1121
<211> 1241
<212>Amino acid
<213> Homo sapiens

<400> 1121
Pro Ala Ala Pro Glu His Thr Asp Pro Ser Glu Pro Arg Gly Ser Val
1 5 10 15
Ser Cys Cys Ser Leu Leu Arg Gly Leu Ser Ser Gly Trp Ser Ser Pro
20 25 30
Leu Leu Pro Ala Pro Val Cys Asn Pro Asn Lys Ala Ile Phe Thr Val
35 40 45
Asp Ala Lys Thr Thr Glu Ile Leu Val Ala Asn Asp Lys Ala Cys Gly
50 55 60
Leu Leu Gly Tyr Ser Ser Gln Asp Leu Ile Gly Gln Lys Leu Thr Gln
65 70 75 80
Phe Phe Leu Arg Ser Asp Ser Asp Val Val Glu Ala Leu Ser Glu Glu
85 90 95
His Met Glu Ala Asp Gly His Ala Ala Val Val Phe Gly Thr Val Val
100 105 110
Asp Ile Ile Ser Arg Ser Gly Glu Lys Ile Pro Val Ser Val Trp Met
115 120 125
Lys Arg Met Arg Gln Glu Arg Arg Leu Cys Cys Val Val Val Leu Glu
130 135 140
Pro Val Glu Arg Val Ser Thr Trp Val Ala Phe Gln Ser Asp Gly Thr
145 150 155 160
Val Thr Ser Cys Asp Ser Leu Phe Ala His Leu His Gly Tyr Val Ser
165 170 175
Gly Glu Asp Val Ala Gly Gln His Ile Thr Asp Leu Ile Pro Ser Val
180 185 190
Gln Leu Pro Pro Ser Gly Gln His Ile Pro Lys Asn Leu Lys Ile Gln

| | | |
|---|-----|-----|
| 195 | 200 | 205 |
| Arg Ser Val Gly Arg Ala Arg Asp Gly Thr Thr Phe Pro Leu Ser Leu | | |
| 210 | 215 | 220 |
| Lys Leu Lys Ser Gln Pro Ser Ser Glu Glu Ala Thr Thr Gly Glu Ala | | |
| 225 | 230 | 235 |
| Ala Pro Val Ser Gly Tyr Arg Ala Ser Val Trp Val Phe Cys Thr Ile | | 240 |
| 245 | 250 | 255 |
| Ser Gly Leu Ile Thr Leu Leu Pro Asp Gly Thr Ile His Gly Ile Asn | | |
| 260 | 265 | 270 |
| His Ser Phe Ala Leu Thr Leu Phe Gly Tyr Gly Lys Thr Glu Leu Leu | | 275 |
| 275 | 280 | 285 |
| Gly Lys Asn Ile Thr Phe Leu Ile Pro Gly Phe Tyr Ser Tyr Met Asp | | |
| 290 | 295 | 300 |
| Leu Ala Tyr Asn Ser Ser Leu Gln Leu Pro Asp Leu Ala Ser Cys Leu | | |
| 305 | 310 | 315 |
| Asp Val Gly Asn Glu Ser Gly Cys Gly Glu Arg Thr Leu Asp Pro Trp | | 320 |
| 325 | 330 | 335 |
| Gln Gly Gln Asp Pro Ala Glu Gly Gly Gln Asp Pro Arg Ile Asn Val | | |
| 340 | 345 | 350 |
| Val Leu Ala Gly Gly His Val Val Pro Arg Asp Glu Ile Arg Lys Leu | | |
| 355 | 360 | 365 |
| Met Glu Ser Gln Asp Ile Phe Thr Gly Thr Gln Thr Glu Leu Ile Ala | | |
| 370 | 375 | 380 |
| Gly Gly Gln Leu Leu Ser Cys Leu Ser Pro Gln Pro Ala Pro Gly Val | | |
| 385 | 390 | 395 |
| Asp Asn Val Pro Glu Gly Ser Leu Pro Val His Gly Glu Gln Ala Leu | | 400 |
| 405 | 410 | 415 |
| Pro Lys Asp Gln Gln Ile Thr Ala Leu Gly Arg Glu Glu Pro Val Ala | | |
| 420 | 425 | 430 |
| Ile Glu Ser Pro Gly Gln Asp Leu Leu Gly Glu Ser Arg Ser Glu Pro | | |
| 435 | 440 | 445 |
| Val Asp Val Lys Pro Phe Ala Ser Cys Glu Asp Ser Glu Ala Pro Val | | |
| 450 | 455 | 460 |
| Pro Ala Glu Asp Gly Gly Ser Asp Ala Gly Met Cys Gly Leu Cys Gln | | |
| 465 | 470 | 475 |
| Lys Ala Gln Leu Glu Arg Met Gly Val Ser Gly Pro Ser Gly Ser Asp | | 480 |
| 485 | 490 | 495 |
| Leu Trp Ala Gly Ala Ala Val Ala Lys Pro Gln Ala Lys Gly Gln Leu | | |
| 500 | 505 | 510 |
| Ala Gly Gly Ser Leu Leu Met His Cys Pro Cys Tyr Gly Ser Glu Trp | | |
| 515 | 520 | 525 |
| Gly Leu Trp Trp Arg Ser Gln Asp Leu Ala Pro Ser Pro Ser Gly Met | | |
| 530 | 535 | 540 |
| Ala Gly Leu Ser Phe Gly Thr Pro Thr Leu Asp Glu Pro Trp Leu Gly | | |
| 545 | 550 | 555 |
| Val Glu Asn Asp Arg Glu Glu Leu Gln Thr Cys Leu Ile Lys Glu Gln | | 560 |
| 565 | 570 | 575 |
| Leu Ser Gln Leu Ser Leu Ala Gly Ala Leu Asp Val Pro His Ala Glu | | |
| 580 | 585 | 590 |
| Leu Val Pro Thr Glu Cys Gln Ala Val Thr Ala Pro Val Ser Ser Cys | | |
| 595 | 600 | 605 |
| Asp Leu Gly Gly Arg Asp Leu Cys Gly Gly Cys Thr Gly Ser Ser Ser | | |
| 610 | 615 | 620 |
| Ala Cys Tyr Ala Leu Ala Thr Asp Leu Pro Gly Gly Leu Glu Ala Val | | |
| 625 | 630 | 635 |
| Glu Ala Gln Glu Val Asp Val Asn Ser Phe Ser Trp Asn Leu Lys Glu | | 640 |
| 645 | 650 | 655 |
| Leu Phe Phe Ser Asp Gln Thr Asp Gln Thr Ser Ser Asn Cys Ser Cys | | |
| 660 | 665 | 670 |
| Ala Thr Ser Glu Leu Arg Glu Thr Pro Ser Ser Leu Ala Val Gly Ser | | |
| 675 | 680 | 685 |
| Asp Pro Asp Val Gly Ser Leu Gln Glu Gln Gly Ser Cys Val Leu Asp | | |
| 690 | 695 | 700 |
| Asp Arg Glu Leu Leu Leu Leu Thr Gly Thr Cys Val Asp Leu Gly Gln | | |

| | | | |
|---|------|------|------|
| 705 | 710 | 715 | 720 |
| Gly Arg Arg Phe Arg Glu Ser Cys Val Gly His Asp Pro Thr Glu Pro | | | |
| 725 | 730 | 735 | |
| Leu Glu Val Cys Leu Val Ser Ser Glu His Tyr Ala Ala Ser Asp Arg | | | |
| 740 | 745 | 750 | |
| Glu Ser Pro Gly His Val Pro Ser Thr Leu Asp Ala Gly Pro Glu Asp | | | |
| 755 | 760 | 765 | |
| Thr Cys Pro Ser Ala Glu Glu Pro Arg Leu Asn Val Gln Val Thr Ser | | | |
| 770 | 775 | 780 | |
| Thr Pro Val Ile Val Met Arg Gly Ala Ala Gly Leu Gln Arg Glu Ile | | | |
| 785 | 790 | 795 | 800 |
| Gln Glu Gly Ala Tyr Ser Gly Ser Cys Tyr His Arg Asp Gly Leu Arg | | | |
| 805 | 810 | 815 | |
| Leu Ser Ile Gln Phe Glu Val Arg Arg Val Glu Leu Gln Gly Pro Thr | | | |
| 820 | 825 | 830 | |
| Pro Leu Phe Cys Cys Trp Leu Val Lys Asp Leu Leu His Ser Gln Arg | | | |
| 835 | 840 | 845 | |
| Asp Ser Ala Ala Arg Thr Arg Leu Phe Leu Ala Ser Leu Pro Gly Ser | | | |
| 850 | 855 | 860 | |
| Thr His Ser Thr Ala Ala Glu Leu Thr Gly Pro Ser Leu Val Glu Val | | | |
| 865 | 870 | 875 | 880 |
| Leu Arg Ala Arg Pro Trp Phe Glu Glu Pro Pro Lys Ala Val Glu Leu | | | |
| 885 | 890 | 895 | |
| Glu Gly Leu Ala Ala Cys Glu Gly Glu Tyr Ser Gln Lys Tyr Ser Thr | | | |
| 900 | 905 | 910 | |
| Met Ser Pro Leu Gly Ser Gly Ala Phe Gly Phe Val Trp Thr Ala Val | | | |
| 915 | 920 | 925 | |
| Asp Lys Glu Lys Asn Lys Glu Val Val Val Lys Phe Ile Lys Lys Glu | | | |
| 930 | 935 | 940 | |
| Lys Val Leu Glu Asp Cys Trp Ile Glu Asp Pro Lys Leu Gly Lys Val | | | |
| 945 | 950 | 955 | 960 |
| Thr Leu Glu Ile Ala Ile Leu Ser Arg Val Glu His Ala Asn Ile Ile | | | |
| 965 | 970 | 975 | |
| Lys Val Leu Asp Ile Phe Glu Asn Gln Gly Phe Phe Gln Leu Val Met | | | |
| 980 | 985 | 990 | |
| Glu Lys His Gly Ser Gly Leu Asp Leu Phe Ala Phe Ile Asp Arg His | | | |
| 995 | 1000 | 1005 | |
| Pro Arg Leu Asp Glu Pro Leu Ala Ser Tyr Ile Phe Arg Gln Val Arg | | | |
| 1010 | 1015 | 1020 | |
| Ala Gln Gln Ser Arg Leu Val Ser Ala Val Gly Tyr Leu Arg Leu Lys | | | |
| 1025 | 1030 | 1035 | 1040 |
| Asp Ile Ile His Arg Asp Ile Lys Asp Glu Asn Ile Val Ile Ala Glu | | | |
| 1045 | 1050 | 1055 | |
| Asp Phe Thr Ile Lys Leu Ile Asp Phe Gly Ser Ala Ala Tyr Leu Glu | | | |
| 1060 | 1065 | 1070 | |
| Arg Gly Lys Leu Phe Tyr Thr Phe Cys Gly Thr Ile Glu Tyr Cys Ala | | | |
| 1075 | 1080 | 1085 | |
| Pro Glu Val Leu Met Gly Asn Pro Tyr Arg Gly Pro Glu Leu Glu Met | | | |
| 1090 | 1095 | 1100 | |
| Trp Ser Leu Gly Val Thr Leu Tyr Thr Leu Val Phe Glu Glu Asn Pro | | | |
| 1105 | 1110 | 1115 | 1120 |
| Phe Cys Glu Leu Glu Glu Thr Val Glu Ala Ala Ile His Pro Pro Tyr | | | |
| 1125 | 1130 | 1135 | |
| Leu Val Ser Lys Glu Leu Met Ser Leu Val Ser Gly Leu Leu Gln Pro | | | |
| 1140 | 1145 | 1150 | |
| Val Pro Glu Arg Arg Thr Thr Leu Glu Lys Leu Val Thr Asp Pro Trp | | | |
| 1155 | 1160 | 1165 | |
| Val Thr Glu Pro Val Asn Leu Ala Asp Tyr Thr Trp Glu Glu Val Phe | | | |
| 1170 | 1175 | 1180 | |
| Arg Val Asn Lys Pro Glu Ser Gly Val Leu Ser Ala Ala Ser Leu Glu | | | |
| 1185 | 1190 | 1195 | 1200 |
| Met Gly Asn Arg Ser Leu Ser Asp Val Ala Gln Ala Gln Glu Leu Cys | | | |
| 1205 | 1210 | 1215 | |
| Gly Gly Pro Val Pro Gly Glu Ala Pro Asn Gly Gln Gly Cys Leu His | | | |

| | | |
|-------------------------------------|----------|------|
| 1220 | 1225 | 1230 |
| Pro Gly Asp Pro Arg Leu Leu Thr Ser | | |
| 1235 | 12401241 | |

<210> 1122
<211> 395
<212>Amino acid
<213> Homo sapiens

<400> 1122
Pro Gly Thr Ser Ala Ala Thr Cys Arg Phe Leu Ser Pro Pro Val Ile
1 5 10 15
Ser Leu Ser Phe Thr Gly Leu Cys Ile Ser Asp Leu Val Val Ala Val
20 25 30
Asn Gly Val Trp Ile Leu Val Glu Thr Phe Met Leu Lys Gly Gly Asn
35 40 45
Phe Phe Ser Lys His Val Pro Trp Ser Tyr Leu Val Phe Leu Thr Ile
50 55 60
Tyr Gly Val Glu Leu Phe Leu Lys Val Ala Gly Leu Gly Pro Val Glu
65 70 75 80
Tyr Leu Ser Ser Gly Trp Asn Leu Phe Asp Phe Ser Val Thr Val Phe
85 90 95
Ala Phe Leu Gly Leu Leu Ala Leu Ala Leu Asn Met Glu Pro Phe Tyr
100 105 110
Phe Ile Val Val Leu Arg Pro Leu Gln Leu Leu Arg Leu Phe Lys Leu
115 120 125
Lys Glu Arg Tyr Arg Asn Val Leu Asp Thr Met Phe Glu Leu Leu Pro
130 135 140
Arg Met Ala Ser Leu Gly Leu Thr Leu Leu Ile Phe Tyr Tyr Ser Phe
145 150 155 160
Ala Ile Val Gly Met Glu Phe Phe Cys Gly Ile Val Phe Pro Asn Cys
165 170 175
Cys Asn Thr Ser Thr Val Ala Asp Ala Tyr Arg Trp Arg Asn His Thr
180 185 190
Val Gly Asn Arg Thr Val Val Glu Glu Gly Tyr Tyr Tyr Leu Asn Asn
195 200 205
Phe Asp Asn Ile Leu Asn Ser Phe Val Thr Leu Phe Glu Leu Thr Val
210 215 220
Val Asn Asn Trp Tyr Ile Ile Met Glu Gly Val Thr Ser Gln Thr Ser
225 230 235 240
His Trp Ser Arg Leu Tyr Phe Met Thr Phe Tyr Ile Val Thr Met Val
245 250 255
Val Met Thr Ile Ile Val Ala Phe Ile Leu Glu Ala Phe Val Phe Arg
260 265 270
Met Asn Tyr Ser Arg Lys Asn Gln Asp Ser Glu Val Asp Gly Gly Ile
275 280 285
Thr Leu Glu Lys Glu Ile Ser Lys Glu Glu Leu Val Ala Val Leu Glu
290 295 300
Leu Tyr Arg Glu Ala Arg Gly Ala Ser Ser Asp Val Thr Arg Leu Leu
305 310 315 320
Glu Thr Leu Ser Gln Met Glu Arg Tyr Gln Gln His Ser Met Val Phe
325 330 335
Leu Gly Arg Arg Ser Arg Thr Lys Ser Asp Leu Ser Leu Lys Met Tyr
340 345 350
Gln Glu Glu Ile Gln Glu Trp Tyr Glu Glu His Ala Arg Glu Gln Glu
355 360 365
Gln Gln Arg Gln Leu Ser Ser Ser Ala Ala Pro Ala Ala Gln Gln Pro
370 375 380
Pro Gly Ser Arg Gln Arg Ser Gln Thr Val Thr

385

390

395

<210> 1123
<211> 328
<212>Amino acid
<213> Homo sapiens

<400> 1123
Leu Ala Gly Val Gly Thr Gln Ala Pro Pro Arg Arg Pro Gly Gly Glu
1 5 10 15
Met Ala Ala Gly Gln Asn Gly His Glu Glu Trp Val Gly Ser Ala Tyr
20 25 30
Leu Phe Val Glu Ser Ser Leu Asp Lys Val Val Leu Ser Asp Ala Tyr
35 40 45
Ala His Pro Gln Gln Lys Val Ala Val Tyr Arg Ala Leu Gln Ala Ala
50 55 60
Leu Ala Glu Ser Gly Gly Ser Pro Asp Val Leu Gln Met Leu Lys Ile
65 70 75 80
His Arg Ser Asp Pro Gln Leu Ile Val Gln Leu Arg Phe Cys Gly Arg
85 90 95
Gln Pro Cys Gly Arg Phe Leu Arg Ala Tyr Arg Glu Gly Ala Leu Arg
100 105 110
Ala Ala Leu Gln Arg Ser Leu Ala Ala Leu Ala Gln His Ser Val
115 120 125
Pro Leu Gln Leu Asp Leu Arg Ala Gly Ala Glu Arg Leu Glu Ala Leu
130 135 140
Leu Ala Asp Glu Glu Arg Cys Leu Ser Cys Ile Leu Ala Gln Gln Pro
145 150 155 160
Asp Arg Leu Arg Asp Glu Glu Leu Ala Glu Leu Glu Asp Ala Leu Arg
165 170 175
Asn Leu Lys Cys Gly Ser Gly Ala Arg Gly Gly Asp Gly Glu Val Ala
180 185 190
Ser Ala Pro Leu Gln Pro Pro Val Pro Ser Leu Ser Glu Val Lys Pro
195 200 205
Pro Pro Pro Pro Pro Ala Gln Thr Phe Leu Phe Gln Gly Gln Pro
210 215 220
Val Val Asn Arg Pro Leu Ser Leu Lys Asp Gln Gln Thr Phe Ala Arg
225 230 235 240
Ser Val Gly Leu Lys Trp Arg Lys Val Gly Arg Ser Leu Gln Arg Gly
245 250 255
Cys Arg Ala Leu Arg Asp Pro Ala Leu Asp Ser Leu Ala Tyr Glu Tyr
260 265 270
Glu Arg Glu Gly Leu Tyr Glu Gln Ala Phe Gln Leu Leu Arg Arg Phe
275 280 285
Val Gln Ala Glu Gly Arg Arg Ala Thr Leu Gln Arg Leu Val Glu Ala
290 295 300
Leu Glu Glu Asn Glu Leu Thr Ser Leu Ala Glu Asp Leu Leu Gly Leu
305 310 315 320
Thr Asp Pro Asn Gly Gly Leu Ala
325 328

<210> 1124
<211> 667
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature

<222> (1)...(667)
 <223> X = any amino acid or stop code

<400> 1124
 Ser Ser Lys Pro Lys Leu Lys Lys Arg Phe Ser Leu Arg Ser Val Gly
 1 5 10 15
 Arg Ser Val Arg Gly Ser Val Arg Gly Ile Leu Gln Trp Arg Gly Thr
 20 25 30
 Val Asp Pro Pro Ser Ser Ala Gly Pro Leu Glu Thr Ser Ser Gly Pro
 35 40 45
 Pro Val Leu Gly Gly Asn Ser Asn Ser Asn Ser Gly Gly Ala Gly
 50 55 60
 Thr Val Gly Arg Gly Leu Val Ser Asp Gly Thr Ser Pro Gly Glu Arg
 65 70 75 80
 Trp Thr His Arg Phe Glu Arg Leu Arg Leu Ser Arg Gly Gly Gly Ala
 85 90 95
 Leu Lys Asp Gly Ala Gly Met Val Gln Arg Glu Glu Leu Leu Ser Phe
 100 105 110
 Met Gly Ala Glu Glu Ala Ala Pro Asp Pro Ala Gly Val Gly Arg Gly
 115 120 125
 Gly Gly Val Ala Gly Pro Pro Ser Gly Gly Gly Gln Pro Gln Trp
 130 135 140
 Gln Lys Cys Arg Leu Leu Leu Arg Ser Glu Gly Glu Gly Gly Gly
 145 150 155 160
 Ser Arg Leu Glu Phe Phe Val Pro Pro Lys Ala Ser Arg Pro Arg Leu
 165 170 175
 Ser Ile Pro Cys Ser Ser Ile Thr Asp Val Arg Thr Thr Ala Leu
 180 185 190
 Glu Met Pro Asp Arg Glu Asn Thr Phe Val Val Lys Val Glu Gly Pro
 195 200 205
 Ser Glu Tyr Ile Met Glu Thr Val Asp Ala Gln His Val Lys Ala Trp
 210 215 220
 Val Ser Asp Ile Gln Glu Cys Leu Ser Pro Gly Pro Cys Pro Ala Thr
 225 230 235 240
 Ser Pro Arg Pro Met Thr Leu Pro Leu Ala Pro Gly Thr Ser Phe Leu
 245 250 255
 Thr Arg Glu Asn Thr Asp Ser Leu Glu Leu Ser Cys Leu Asn His Ser
 260 265 270
 Glu Ser Leu Pro Ser Gln Asp Leu Leu Leu Gly Pro Ser Glu Ser Asn
 275 280 285
 Asp Arg Leu Ser Gln Gly Ala Tyr Gly Gly Leu Ser Asp Arg Pro Ser
 290 295 300
 Ala Ser Ile Ser Pro Ser Ser Ala Ser Ile Ala Ala Ser His Phe Asp
 305 310 315 320
 Ser Met Glu Leu Leu Pro Pro Glu Leu Pro Pro Arg Ile Pro Ile Glu
 325 330 335
 Glu Gly Pro Pro Ala Gly Thr Val His Pro Leu Ser Ala Pro Tyr Pro
 340 345 350
 Pro Leu Asp Thr Pro Glu Thr Ala Thr Gly Ser Phe Leu Phe Gln Gly
 355 360 365
 Glu Pro Glu Gly Gly Asp Gln Pro Leu Ser Gly Tyr Pro Trp
 370 375 380
 Phe His Gly Met Leu Ser Arg Leu Lys Ala Ala Gln Leu Val Leu Thr
 385 390 395 400
 Gly Gly Thr Gly Ser His Gly Val Phe Leu Val Arg Gln Ser Glu Thr
 405 410 415
 Arg Arg Gly Glu Tyr Val Leu Thr Phe Asn Phe Gln Gly Lys Ala Lys
 420 425 430
 His Leu Arg Leu Ser Leu Asn Glu Gly Gln Cys Arg Val Gln His
 435 440 445

Leu Trp Phe Gln Ser Ile Phe Asp Met Leu Glu His Phe Arg Val His
 450 455 460
 Pro Ile Pro Leu Glu Ser Gly Gly Ser Ser Asp Val Val Leu Val Ser
 465 470 475 480
 Tyr Val Pro Ser Ser Gln Arg Gln Gln Gly Glu Gln Ser Arg Ser Ala
 485 490 495
 Gly Glu Glu Val Pro Val His Pro Arg Ser Glu Ala Gly Ser Arg Leu
 500 505 510
 Gly Ala Met Arg Gly Cys Ala Arg Glu Met Asp Ala Thr Pro Asn Ala
 515 520 525
 Ser Cys Thr Leu Met Pro Phe Gly Ala Ser Asp Cys Glu Pro Thr Thr
 530 535 540
 Ser His Asp Pro Pro Gln Pro Pro Glu Pro Pro Ser Trp Thr Asp Pro
 545 550 555 560
 Pro Gln Pro Gly Glu Glu Ala Ser Arg Ala Pro Gly Ser Gly Gly
 565 570 575
 Gln Gln Ala Ala Ala Ala Lys Glu Arg Gln Glu Lys Glu Lys Ala
 580 585 590
 Gly Gly Gly Val Pro Glu Glu Leu Val Pro Val Val Xaa Leu Val
 595 600 605
 Pro Val Gly Glu Leu Gly Glu Gly His Arg Pro Gln Ala Gln Glu Ala
 610 615 620
 Gln Gly Arg Leu Gly Pro Gly Asp Ala Gly Val Pro Pro Met Val
 625 630 635 640
 Gln Leu Gln Ser Pro Leu Gly Gly Asp Gly Glu Glu Gly His
 645 650 655
 Pro Arg Ala Ile Asn Asn Gln Tyr Ser Phe Val
 660 665 667

<210> 1125
 <211> 387
 <212>Amino acid
 <213> Homo sapiens

<400> 1125
 Phe Arg Ala Pro Val Gly Thr Ala Ala Arg Ser Pro Gln Val Val Ile
 1 5 10 15
 Arg Arg Leu Pro Pro Gly Leu Thr Lys Glu Gln Leu Glu Glu Gln Leu
 20 25 30
 Arg Pro Leu Pro Ala His Asp Tyr Phe Glu Phe Phe Ala Ala Asp Leu
 35 40 45
 Ser Leu Tyr Pro His Leu Tyr Ser Arg Ala Tyr Ile Asn Phe Arg Asn
 50 55 60
 Pro Asp Asp Ile Leu Leu Phe Arg Asp Arg Phe Asp Gly Tyr Ile Phe
 65 70 75 80
 Leu Asp Ser Lys Asp Pro Glu Tyr Lys Lys Phe Leu Glu Thr Tyr Cys
 85 90 95
 Val Glu Glu Glu Lys Thr Ser Ala Asn Pro Glu Thr Leu Leu Gly Glu
 100 105 110
 Met Glu Ala Lys Thr Arg Glu Leu Ile Ala Arg Arg Thr Thr Pro Leu
 115 120 125
 Leu Glu Tyr Ile Lys Asn Arg Lys Leu Glu Lys Gln Arg Ile Arg Glu
 130 135 140
 Glu Lys Arg Glu Glu Arg Arg Arg Arg Glu Leu Glu Lys Lys Arg Leu
 145 150 155 160
 Arg Glu Glu Glu Lys Arg Arg Arg Arg Glu Glu Glu Arg Cys Lys Lys
 165 170 175
 Lys Glu Thr Asp Lys Gln Lys Lys Ile Ala Glu Lys Glu Val Arg Ile
 180 185 190

Lys Leu Leu Lys Pro Glu Lys Gly Glu Glu Pro Thr Thr Glu Lys
 195 200 205
 Pro Lys Glu Arg Gly Glu Glu Ile Asp Thr Gly Gly Lys Gln Glu
 210 215 220
 Ser Cys Ala Pro Gly Ala Val Val Lys Ala Arg Pro Met Glu Gly Ser
 225 230 235 240
 Leu Glu Glu Pro Gln Glu Thr Ser His Ser Gly Ser Asp Lys Glu His
 245 250 255
 Arg Asp Val Glu Arg Ser Gln Glu Gln Glu Ser Glu Ala Gln Arg Tyr
 260 265 270
 His Val Asp Asp Gly Arg Arg His Arg Ala His His Glu Pro Glu Arg
 275 280 285
 Leu Ser Arg Arg Ser Glu Asp Glu Gln Arg Trp Gly Lys Gly Pro Gly
 290 295 300
 Gln Asp Arg Gly Lys Lys Gly Ser Gln Asp Ser Gly Ala Pro Gly Glu
 305 310 315 320
 Ala Met Glu Arg Leu Gly Arg Ala Gln Arg Cys Asp Asp Ser Pro Ala
 325 330 335
 Pro Arg Lys Glu Arg Leu Ala Asn Lys Asp Arg Pro Ala Leu Gln Leu
 340 345 350
 Tyr Asp Pro Gly Ala Arg Phe Arg Ala Arg Glu Cys Gly Gly Asn Arg
 355 360 365
 Arg Ile Cys Lys Ala Glu Gly Ser Gly Thr Gly Pro Glu Lys Arg Glu
 370 375 380
 Glu Ala Glu
 385 387

<210> 1126
 <211> 208
 <212>Amino acid
 <213> Homo sapiens

<400> 1126
 Gly Val Trp Gly Val Cys Val Ser Gly Leu Leu Gln Val Gly Ser Gln
 1 5 10 15
 Arg Ala Gln Ala Trp Arg Ala Trp Ser Pro Met Glu Thr Pro Leu Thr
 20 25 30
 Gly Thr Phe Leu Trp Pro His Ile Pro Gln Gly Leu Phe Phe Asp Asp
 35 40 45
 Ser Tyr Gly Phe Tyr Pro Gly Gln Val Leu Ile Gly Pro Ala Lys Ile
 50 55 60
 Phe Ser Ser Val Gln Trp Leu Ser Gly Val Lys Pro Val Leu Ser Thr
 65 70 75 80
 Lys Ser Lys Phe Arg Val Val Val Glu Val Gln Val Val Glu Leu
 85 90 95
 Lys Val Thr Trp Ile Thr Lys Ser Phe Cys Pro Gly Gly Thr Asp Ser
 100 105 110
 Val Ser Pro Pro Pro Ser Val Ile Thr Gln Glu Asn Leu Gly Arg Val
 115 120 125
 Lys Arg Leu Gly Cys Phe Asp His Ala Gln Arg His Ala Trp Gly Ala
 130 135 140
 Leu Ser Val Cys Leu Pro Ser Gln Gly Arg Ala Ser Gln Asp Cys Leu
 145 150 155 160
 Gly Met Ser Arg Lys Lys Leu Arg Pro Gly Gly Leu Tyr Gly Gln
 165 170 175
 Glu Gly Glu Ala Pro Val Glu Glu Ala Gly Cys Ala Asp His Val Met
 180 185 190
 Leu Pro Arg His Pro Val Phe Pro Gly Pro Phe His Gly Arg Pro Arg
 195 200 205 208

<210> 1127
 <211> 670
 <212>Amino acid
 <213> Homo sapiens

<400> 1127
 Phe Arg Asp Ser Ser Pro Cys Ser Ala Phe Glu Phe His Cys Leu Ser
 1 5 10 15
 Gly Glu Cys Ile His Ser Ser Trp Arg Cys Asp Gly Gly Pro Asp Cys
 20 25 30
 Lys Asp Lys Ser Asp Glu Glu Asn Cys Ala Val Ala Thr Cys Arg Pro
 35 40 45
 Asp Glu Phe Gln Cys Ser Asp Gly Asn Cys Ile His Gly Ser Arg Gln
 50 55 60
 Cys Asp Arg Glu Tyr Asp Cys Lys Asp Met Ser Asp Glu Val Gly Cys
 65 70 75 80
 Val Asn Val Thr Leu Cys Glu Gly Pro Asn Lys Phe Lys Cys His Ser
 85 90 95
 Gly Glu Cys Ile Thr Leu Asp Lys Val Cys Asn Met Ala Arg Asp Cys
 100 105 110
 Arg Asp Trp Ser Asp Glu Pro Ile Lys Glu Cys Gly Thr Asn Glu Cys
 115 120 125
 Leu Asp Asn Asn Gly Cys Ser His Val Cys Asn Asp Leu Lys Ile
 130 135 140
 Gly Tyr Glu Cys Leu Cys Pro Asp Gly Phe Gln Leu Val Ala Gln Arg
 145 150 155 160
 Arg Cys Glu Asp Ile Asp Glu Cys Gln Asp Pro Asp Thr Cys Ser Gln
 165 170 175
 Leu Cys Val Asn Leu Glu Gly Gly Tyr Lys Cys Gln Cys Glu Glu Gly
 180 185 190
 Phe Gln Leu Asp Pro His Thr Lys Ala Cys Lys Ala Val Gly Ser Ile
 195 200 205
 Ala Tyr Leu Phe Phe Thr Asn Arg His Glu Val Arg Lys Met Thr Leu
 210 215 220
 Asp Arg Ser Glu Tyr Thr Ser Leu Ile Pro Asn Leu Arg Asn Val Val
 225 230 235 240
 Ala Leu Asp Thr Glu Val Ala Ser Asn Arg Ile Tyr Trp Ser Asp Leu
 245 250 255
 Ser Gln Arg Met Ile Cys Ser Thr Gln Leu Asp Arg Ala His Gly Val
 260 265 270
 Ser Ser Tyr Asp Thr Val Ile Ser Arg Asp Ile Gln Ala Pro Asp Gly
 275 280 285
 Leu Ala Val Asp Trp Ile His Ser Asn Ile Tyr Trp Thr Asp Ser Val
 290 295 300
 Leu Gly Thr Val Ser Val Ala Asp Thr Lys Gly Val Lys Arg Lys Thr
 305 310 315 320
 Leu Phe Arg Glu Asn Gly Ser Lys Pro Arg Ala Ile Val Val Asp Pro
 325 330 335
 Val His Gly Phe Met Tyr Trp Thr Asp Trp Gly Thr Pro Ala Lys Ile
 340 345 350
 Lys Lys Gly Gly Leu Asn Gly Val Asp Ile Tyr Ser Leu Val Thr Glu
 355 360 365
 Asn Ile Gln Trp Pro Asn Gly Ile Thr Leu Asp Leu Leu Ser Gly Arg
 370 375 380
 Leu Tyr Trp Val Asp Ser Lys Leu His Ser Ile Ser Ser Ile Asp Val
 385 390 400

Asn Gly Gly Asn Arg Lys Thr Ile Leu Glu Asp Glu Lys Arg Leu Ala
 405 410 415
 His Pro Phe Ser Leu Ala Val Phe Glu Asp Lys Val Phe Trp Thr Asp
 420 425 430
 Ile Ile Asn Glu Ala Ile Phe Ser Ala Asn Arg Leu Thr Gly Ser Asp
 435 440 445
 Val Asn Leu Leu Ala Glu Asn Leu Leu Ser Pro Glu Asp Met Val Leu
 450 455 460
 Phe His Asn Leu Thr Gln Pro Arg Gly Val Asn Trp Cys Glu Arg Thr
 465 470 475 480
 Thr Leu Ser Asn Gly Gly Cys Gln Tyr Leu Cys Leu Pro Ala Pro Gln
 485 490 495
 Ile Asn Pro His Ser Pro Lys Phe Thr Cys Ala Cys Pro Asp Gly Met
 500 505 510
 Leu Leu Ala Arg Asp Met Arg Ser Cys Leu Thr Glu Gly Glu Ala Ala
 515 520 525
 Val Ala Thr Gln Glu Thr Ser Thr Val Arg Leu Lys Val Ser Ser Thr
 530 535 540
 Ala Val Arg Thr Gln His Thr Thr Arg Pro Val Pro Asp Thr Ser
 545 550 555 560
 Arg Leu Pro Gly Ala Thr Pro Gly Leu Thr Thr Val Glu Ile Val Thr
 565 570 575
 Met Ser His Gln Ala Leu Gly Asp Val Ala Gly Arg Gly Asn Glu Lys
 580 585 590
 Lys Pro Ser Ser Val Arg Ala Leu Ser Ile Val Leu Pro Ile Val Leu
 595 600 605
 Leu Val Phe Leu Cys Leu Gly Val Phe Leu Leu Trp Lys Asn Trp Arg
 610 615 620
 Leu Lys Asn Ile Asn Ser Ile Asn Phe Asp Asn Pro Val Tyr Gln Lys
 625 630 635 640
 Thr Thr Glu Asp Glu Val His Ile Cys His Asn Gln Asp Gly Tyr Ser
 645 650 655
 Tyr Pro Ser Arg Gln Met Val Ser Leu Glu Asp Asp Val Ala
 660 665 670

<210> 1128
 <211> 393
 <212>Amino acid
 <213> Homo sapiens

<400> 1128
 Arg Ile Pro Gly Leu Gly Pro Pro Gly Ser Pro Pro Pro Pro Pro His
 1 5 10 15
 Val Arg Gly Met Pro Gly Cys Pro Cys Pro Gly Cys Gly Met Ala Gly
 20 25 30
 Pro Arg Leu Leu Phe Leu Thr Ala Leu Ala Leu Glu Leu Leu Gly Arg
 35 40 45
 Ala Gly Gly Ser Gln Pro Ala Leu Arg Ser Arg Gly Thr Ala Thr Ala
 50 55 60
 Cys Arg Leu Asp Asn Lys Glu Ser Glu Ser Trp Gly Ala Leu Leu Ser
 65 70 75 80
 Gly Glu Arg Leu Asp Thr Trp Ile Cys Ser Leu Leu Gly Ser Leu Met
 85 90 95
 Val Gly Leu Ser Gly Val Phe Pro Leu Leu Val Ile Pro Leu Glu Met
 100 105 110
 Gly Thr Met Leu Arg Ser Glu Ala Gly Ala Trp Arg Leu Lys Gln Leu
 115 120 125
 Leu Ser Phe Ala Leu Gly Gly Leu Leu Gly Asn Val Phe Leu His Leu
 130 135 140

Leu Pro Glu Ala Trp Ala Tyr Thr Cys Ser Ala Ser Pro Gly Gly Glu
 145 150 155 160
 Gly Gln Ser Leu Gln Gln Gln Gln Leu Gly Leu Trp Val Ile Ala
 165 170 175
 Gly Ile Leu Thr Phe Leu Ala Leu Glu Lys Met Phe Leu Asp Ser Lys
 180 185 190
 Glu Glu Gly Thr Ser Gln Ala Pro Asn Lys Asp Pro Thr Ala Ala Ala
 195 200 205
 Ala Ala Leu Asn Gly Gly His Cys Leu Ala Gln Pro Ala Ala Glu Pro
 210 215 220
 Gly Leu Gly Ala Val Val Arg Ser Ile Lys Val Ser Gly Tyr Leu Asn
 225 230 235 240
 Leu Leu Ala Asn Thr Ile Asp Asn Phe Thr His Gly Leu Ala Val Ala
 245 250 255
 Ala Ser Phe Leu Val Ser Lys Lys Ile Gly Leu Leu Thr Thr Met Ala
 260 265 270
 Ile Leu Leu His Glu Ile Pro His Glu Val Gly Asp Phe Ala Ile Leu
 275 280 285
 Leu Arg Ala Gly Phe Asp Arg Trp Ser Ala Ala Lys Leu Gln Leu Ser
 290 295 300
 Thr Ala Leu Gly Gly Leu Leu Gly Ala Gly Phe Ala Ile Cys Thr Gln
 305 310 315 320
 Ser Pro Lys Gly Val Glu Glu Thr Ala Ala Trp Val Leu Pro Phe Thr
 325 330 335
 Ser Gly Gly Phe Leu Tyr Ile Ala Leu Val Asn Val Leu Pro Asp Leu
 340 345 350
 Leu Glu Glu Glu Asp Pro Trp Arg Ser Leu Gln Gln Leu Leu Leu
 355 360 365
 Cys Ala Gly Ile Val Val Met Val Leu Phe Ser Leu Phe Val Asp
 370 375 380 383

<210> 1129
 <211> 174
 <212>Amino acid
 <213> Homo sapiens

<400> 1129
 Gly Lys Val Ser Ala Gly Gln Ala Gly Ala Asp Arg Thr Leu Arg Arg
 1 5 10 15
 Ala Pro Glu Pro Arg Phe Ser Gln Glu Pro Thr Gly Asn Ser Ala Tyr
 20 25 30
 Pro Gln Leu Arg Pro Phe Leu Asp Pro Gln Gly Arg Asp Leu Lys Pro
 35 40 45
 Ser Ala Leu Val Pro Pro Thr Arg Ser His Thr Gly Arg Arg Pro Trp
 50 55 60
 Leu His Thr Gln Pro Leu Pro Gly Pro Gln Gly Arg Ala Trp Gly Pro
 65 70 75 80
 Thr Cys Thr Pro Ala Cys Val Asp Arg Val Leu Glu Ser Glu Glu Gly
 85 90 95
 Arg Arg Glu Tyr Leu Ala Phe Pro Thr Ser Lys Ser Ser Gly Gln Lys
 100 105 110
 Gly Arg Lys Glu Leu Leu Lys Gly Asn Gly Arg Arg Ile Asp Tyr Met
 115 120 125
 Leu His Ala Glu Glu Gly Leu Cys Pro Asp Trp Lys Ala Glu Val Glu
 130 135 140
 Glu Phe Ser Phe Ile Thr Gln Leu Ser Gly Leu Thr Asp His Leu Pro
 145 150 155 160
 Val Ala Met Arg Leu Met Val Ser Ser Gly Glu Glu Glu Ala
 165 170 174

<210> 1130
<211> 231
<212>Amino acid
<213> Homo sapiens

<400> 1130
Pro Cys Gly Gly Ile Arg Leu Ser Ala Ser Glu Ala Ala Thr Leu Phe
1 5 10 15
Gly Tyr Leu Val Val Pro Ala Gly Gly Gly Gly Thr Phe Leu Gly Gly
20 25 30
Phe Phe Val Asn Lys Leu Arg Leu Arg Gly Ser Ala Val Ile Lys Phe
35 40 45
Cys Leu Phe Cys Thr Val Val Ser Leu Leu Gly Ile Leu Val Phe Ser
50 55 60
Leu His Cys Pro Ser Val Pro Met Ala Gly Val Thr Ala Ser Tyr Gly
65 70 75 80
Gly Ser Leu Leu Pro Glu Gly His Leu Asn Leu Thr Ala Pro Cys Asn
85 90 95
Ala Ala Cys Ser Cys Gln Pro Glu His Tyr Ser Pro Val Cys Gly Ser
100 105 110
Asp Gly Leu Met Tyr Phe Ser Leu Cys His Ala Gly Cys Pro Ala Ala
115 120 125
Thr Glu Thr Asn Val Asp Gly Gln Lys Val Ser Gly Ala Ala Ala Tyr
130 135 140
Arg Pro Cys Pro Pro Leu Asp Pro Gly Lys Gly Pro Pro Cys Leu Pro
145 150 155 160
Leu Val Ile Gly Ala Ile Val Gly Leu Pro Arg Cys Thr Glu Thr Val
165 170 175
Ala Val Ser Leu Arg Ile Phe Pro Leu Val Leu Ala Met His Cys Arg
180 185 190
Glu Met His Phe Asn Leu Ser Glu Lys Ala Pro Pro Ser Gly Phe His
195 200 205
Ile Arg Cys Asn Phe Leu Tyr Ile Pro Gln Gln His Ser Cys Thr Asn
210 215 220
Gly Asn Ser Thr Met Cys Pro
225 230 231

<210> 1131
<211> 234
<212>Amino acid
<213> Homo sapiens

<400> 1131
Leu Leu Arg Lys Val Gly Ala Pro Gly Gly Ala Arg Gly Val Ile Arg
1 5 10 15
Leu Leu Asp Trp Phe Glu Arg Pro Asp Gly Phe Leu Leu Val Leu Glu
20 25 30
Arg Pro Glu Pro Ala Gln Asp Leu Phe Asp Phe Ile Thr Glu Arg Gly
35 40 45
Ala Leu Asp Glu Pro Leu Ala Arg Arg Phe Phe Ala Gln Val Leu Ala
50 55 60
Ala Val Arg His Cys His Ser Cys Gly Val Val His Arg Asp Ile Lys
65 70 75 80

| | | | |
|---|-----|-----|-----|
| Asp Glu Asn Leu Leu Val Asp Leu Arg Ser Gly Glu Leu Lys Leu Ile | | | |
| 85 | 90 | 95 | |
| Asp Phe Gly Ser Gly Ala Leu Leu Lys Asp Thr Val Tyr Thr Asp Phe | | | |
| 100 | 105 | 110 | |
| Asp Gly Thr Arg Val Tyr Ser Pro Pro Glu Trp Ile Arg Tyr His Arg | | | |
| 115 | 120 | 125 | |
| Tyr His Gly Arg Ser Ala Thr Val Trp Ser Leu Gly Val Leu Leu Tyr | | | |
| 130 | 135 | 140 | |
| Asp Met Val Cys Gly Asp Ile Pro Phe Glu Gln Asp Glu Glu Ile Leu | | | |
| 145 | 150 | 155 | 160 |
| Arg Gly Arg Leu Leu Phe Arg Arg Arg Val Ser Pro Glu Cys Gln Gln | | | |
| 165 | 170 | 175 | |
| Leu Ile Arg Trp Cys Leu Ser Leu Arg Pro Ser Glu Arg Pro Ser Leu | | | |
| 180 | 185 | 190 | |
| Asp Gln Ile Ala Ala His Pro Trp Met Leu Gly Ala Asp Gly Gly Ala | | | |
| 195 | 200 | 205 | |
| Pro Glu Ser Cys Asp Leu Arg Leu Cys Thr Leu Asp Pro Asp Asp Val | | | |
| 210 | 215 | 220 | |
| Ala Ser Thr Thr Ser Ser Glu Ser Leu | | | |
| 225 | 230 | 234 | |

<210> 1132
<211> 270
<212>Amino acid
<213> Homo sapiens

| | | | |
|---|-----|-----|-----|
| <400> 1132 | | | |
| Gly Lys Asn Ser Gln Lys Ala Ser Pro Val Asp Asp Glu Gln Leu Ser | | | |
| 1 | 5 | 10 | 15 |
| Val Cys Leu Ser Gly Phe Leu Asp Glu Val Met Lys Lys Tyr Gly Ser | | | |
| 20 | 25 | 30 | |
| Leu Val Pro Leu Ser Glu Lys Glu Val Leu Gly Arg Leu Lys Asp Val | | | |
| 35 | 40 | 45 | |
| Phe Asn Glu Asp Phe Ser Asn Arg Lys Pro Phe Ile Asn Arg Glu Ile | | | |
| 50 | 55 | 60 | |
| Thr Asn Tyr Arg Ala Arg His Gln Lys Cys Asn Phe Arg Ile Phe Tyr | | | |
| 65 | 70 | 75 | 80 |
| Asn Lys His Met Leu Asp Met Asp Asp Leu Ala Thr Leu Asp Gly Gln | | | |
| 85 | 90 | 95 | |
| Asn Trp Leu Asn Asp Gln Val Ile Asn Met Tyr Gly Glu Leu Ile Met | | | |
| 100 | 105 | 110 | |
| Asp Ala Val Pro Asp Lys Val His Phe Asn Ser Phe Phe His Arg | | | |
| 115 | 120 | 125 | |
| Gln Leu Val Thr Lys Gly Tyr Asn Gly Val Lys Arg Trp Thr Lys Lys | | | |
| 130 | 135 | 140 | |
| Val Asp Leu Phe Lys Lys Ser Leu Leu Ile Pro Ile His Leu Glu | | | |
| 145 | 150 | 155 | 160 |
| Val His Trp Ser Leu Ile Thr Val Thr Leu Ser Asn Arg Ile Ile Ser | | | |
| 165 | 170 | 175 | |
| Phe Tyr Asp Ser Gln Gly Ile His Phe Lys Phe Cys Val Glu Asn Ile | | | |
| 180 | 185 | 190 | |
| Arg Lys Tyr Leu Leu Thr Glu Ala Arg Glu Lys Asn Arg Leu Asn Leu | | | |
| 195 | 200 | 205 | |
| Gln Gly Trp Gln Thr Ala Val Thr Lys Cys Ile Pro Gln Gln Lys Asn | | | |
| 210 | 215 | 220 | |
| Asp Ser Asp Cys Gly Val Phe Val Leu Gln Tyr Cys Lys Cys Leu Ala | | | |
| 225 | 230 | 235 | 240 |
| Leu Lys Gln Pro Phe Gln Phe Ser Gln Glu Asp Met Pro Arg Val Arg | | | |
| 245 | 250 | 255 | |

Lys Arg Ile Tyr Lys Glu Leu Cys Glu Cys Arg Leu Met Asp
 260 265
 270

<210> 1133
<211> 204
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(204)
<223> X = any amino acid or stop code

<400> 1133
Pro Pro Gly Gly Xaa Gln Gly Ser Ala Ala Lys His Arg Phe Pro Lys
 1 5 10 15
Gly Tyr Arg His Pro Ala Leu Glu Ala Arg Leu Gly Arg Arg Arg Thr
 20 25 30
Val Gln Glu Ala Arg Ala Leu Leu Arg Cys Arg Arg Ala Gly Ile Ser
 35 40 45
Ala Pro Val Val Phe Phe Val Asp Tyr Ala Ser Asn Cys Leu Tyr Met
 50 55 60
Glu Glu Ile Glu Gly Ser Val Thr Val Arg Asp Tyr Ile Gln Ser Thr
 65 70 75 80
Met Glu Thr Glu Lys Thr Pro Gln Gly Leu Ser Asn Leu Ala Lys Thr
 85 90 95
Ile Gly Gln Val Leu Ala Arg Met His Asp Glu Asp Leu Ile His Gly
 100 105 110
Asp Leu Thr Thr Ser Asn Met Leu Leu Lys Pro Pro Leu Glu Gln Leu
 115 120 125
Asn Ile Val Leu Ile Asp Phe Gly Leu Ser Phe Ile Ser Ala Leu Pro
 130 135 140
Glu Asp Lys Gly Val Asp Leu Tyr Val Leu Glu Lys Ala Phe Leu Ser
 145 150 155 160
Thr His Pro Asn Thr Glu Thr Val Phe Glu Ala Phe Leu Lys Ser Tyr
 165 170 175
Ser Thr Ser Ser Lys Lys Ala Arg Pro Val Leu Lys Lys Leu Asp Glu
 180 185 190
Val Arg Leu Arg Gly Lys Lys Arg Ser Met Val Gly
 195 200 204

<210> 1134
<211> 531
<212>Amino acid
<213> Homo sapiens

<400> 1134
Arg Ala Cys Val Phe Arg Pro Glu Asp Met Met Gln Gly Glu Ala His
 1 5 10 15
Pro Ser Ala Ser Leu Ile Asp Arg Thr Ile Lys Met Arg Lys Glu Thr
 20 25 30
Glu Ala Arg Lys Val Val Leu Ala Trp Gly Leu Leu Asn Val Ser Met
 35 40 45
Ala Gly Met Ile Tyr Thr Glu Met Thr Gly Lys Leu Ile Ser Ser Tyr

| | | |
|---|-----|-----|
| 50 | 55 | 60 |
| Tyr Asn Val Thr Tyr Trp Pro Leu Trp Tyr Ile Glu Leu Ala Leu Ala | | |
| 65 | 70 | 75 |
| Ser Leu Phe Ser Leu Asn Ala Leu Phe Asp Phe Trp Arg Tyr Phe Lys | | 80 |
| 85 | 90 | 95 |
| Tyr Thr Val Ala Pro Thr Ser Leu Val Val Ser Pro Gly Gln Gln Thr | | |
| 100 | 105 | 110 |
| Leu Leu Gly Leu Lys Thr Ala Val Val Gln Thr Thr Pro Pro His Asp | | |
| 115 | 120 | 125 |
| Leu Ala Ala Thr Gln Ile Pro Pro Ala Pro Pro Ser Pro Ser Ile Gln | | |
| 130 | 135 | 140 |
| Gly Gln Ser Val Leu Ser Tyr Ser Pro Ser Arg Ser Pro Ser Thr Ser | | |
| 145 | 150 | 155 |
| Pro Lys Phe Thr Thr Ser Cys Met Thr Gly Tyr Ser Pro Gln Leu Gln | | 160 |
| 165 | 170 | 175 |
| Gly Leu Ser Ser Gly Gly Ser Gly Ser Tyr Ser Pro Gly Val Thr Tyr | | |
| 180 | 185 | 190 |
| Ser Pro Val Ser Gly Tyr Asn Lys Leu Ala Ser Phe Ser Pro Ser Pro | | |
| 195 | 200 | 205 |
| Pro Ser Pro Tyr Pro Thr Thr Val Gly Pro Val Glu Ser Ser Gly Leu | | |
| 210 | 215 | 220 |
| Arg Ser Arg Tyr Arg Ser Ser Pro Thr Val Tyr Asn Ser Pro Thr Asp | | |
| 225 | 230 | 235 |
| Lys Glu Asp Tyr Met Thr Asp Leu Arg Thr Leu Asp Thr Phe Leu Arg | | |
| 245 | 250 | 255 |
| Ser Glu Glu Glu Lys Gln His Arg Val Lys Leu Gly Ser Pro Asp Ser | | |
| 260 | 265 | 270 |
| Thr Ser Pro Ser Ser Ser Pro Thr Phe Trp Asn Tyr Ser Arg Ser Met | | |
| 275 | 280 | 285 |
| Gly Asp Tyr Ala Gln Thr Leu Lys Lys Phe Gln Tyr Gln Leu Ala Cys | | |
| 290 | 295 | 300 |
| Arg Ser Gln Ala Pro Cys Ala Asn Lys Asp Glu Ala Asp Leu Ser Ser | | |
| 305 | 310 | 315 |
| Lys Gln Ala Ala Glu Glu Val Trp Ala Arg Val Ala Met Asn Arg Gln | | |
| 325 | 330 | 335 |
| Leu Leu Asp His Met Asp Ser Trp Thr Ala Lys Phe Arg Asn Trp Ile | | |
| 340 | 345 | 350 |
| Asn Glu Thr Ile Leu Val Pro Leu Val Gln Glu Ile Glu Ser Val Ser | | |
| 355 | 360 | 365 |
| Thr Gln Met Arg Arg Met Gly Cys Pro Glu Leu Gln Ile Gly Glu Ala | | |
| 370 | 375 | 380 |
| Ser Ile Thr Ser Leu Lys Gln Ala Ala Leu Val Lys Ala Pro Leu Ile | | |
| 385 | 390 | 395 |
| Pro Thr Leu Asn Thr Ile Val Gln Tyr Leu Asp Leu Thr Pro Asn Gln | | |
| 405 | 410 | 415 |
| Glu Tyr Leu Phe Glu Arg Ile Lys Glu Leu Ser Gln Gly Gly Cys Met | | |
| 420 | 425 | 430 |
| Ser Ser Phe Arg Trp Asn Arg Gly Gly Asp Phe Lys Gly Arg Lys Trp | | |
| 435 | 440 | 445 |
| Asp Thr Asp Leu Pro Thr Asp Ser Ala Ile Ile Met His Val Phe Cys | | |
| 450 | 455 | 460 |
| Thr Tyr Leu Asp Ser Arg Leu Pro Pro His Pro Lys Tyr Pro Asp Gly | | |
| 465 | 470 | 475 |
| Lys Thr Phe Thr Ser Gln His Phe Val Gln Thr Pro Asn Lys Pro Asp | | |
| 485 | 490 | 495 |
| Val Thr Asn Glu Asn Val Phe Cys Ile Tyr Gln Ser Ala Ile Asn Pro | | |
| 500 | 505 | 510 |
| Pro His Tyr Glu Leu Ile Tyr Gln Arg His Val Tyr Ile Pro Ala Lys | | |
| 515 | 520 | 525 |
| Gly Gln Lys | | |
| 530 | 531 | |

<211> 508
<212> Amino acid
<213> Homo sapiens

<400> 1135
Ser Ser Ala Val Glu Phe Ile Asn Arg Asn Asn Ser Val Val Gln Val
1 5 10 15
Leu Leu Ala Ala Gly Ala Asp Pro Asn Leu Gly Asp Asp Phe Ser Ser
20 25 30
Val Tyr Lys Thr Ala Lys Glu Gln Gly Ile His Ser Leu Glu Val Leu
35 40 45
Ile Thr Arg Glu Asp Asp Phe Asn Asn Arg Leu Asn Asn Arg Ala Ser
50 55 60
Phe Lys Gly Cys Thr Ala Leu His Tyr Ala Val Leu Ala Asp Asp Tyr
65 70 75 80
Arg Thr Val Lys Glu Leu Leu Asp Gly Gly Ala Asn Pro Leu Gln Arg
85 90 95
Asn Glu Met Gly His Thr Pro Leu Asp Tyr Ala Arg Glu Gly Glu Val
100 105 110
Met Lys Leu Leu Arg Thr Ser Glu Ala Lys Tyr Gln Glu Lys Gln Arg
115 120 125
Lys Arg Glu Ala Glu Glu Arg Arg Arg Phe Pro Leu Glu Gln Arg Leu
130 135 140
Lys Glu His Ile Ile Gly Gln Glu Ser Ala Ile Ala Thr Val Gly Ala
145 150 155 160
Ala Ile Arg Arg Lys Glu Asn Gly Trp Tyr Asp Glu Glu His Pro Leu
165 170 175
Val Phe Leu Phe Leu Gly Ser Ser Gly Ile Gly Lys Thr Glu Leu Ala
180 185 190
Lys Gln Thr Ala Lys Tyr Met His Lys Asp Ala Lys Lys Gly Phe Ile
195 200 205
Arg Leu Asp Met Ser Glu Phe Gln Glu Arg His Glu Val Ala Lys Phe
210 215 220
Ile Gly Ser Pro Pro Gly Tyr Val Gly His Glu Glu Gly Gly Gln Leu
225 230 235 240
Thr Lys Lys Leu Lys Gln Cys Pro Asn Ala Val Val Leu Phe Asp Glu
245 250 255
Val Asp Lys Ala His Pro Asp Val Leu Thr Ile Met Leu Gln Leu Phe
260 265 270
Asp Glu Gly Arg Leu Thr Asp Gly Lys Gly Lys Thr Ile Asp Cys Lys
275 280 285
Asp Ala Ile Phe Ile Met Thr Ser Asn Val Ala Ser Asp Glu Ile Ala
290 295 300
Gln His Ala Leu Gln Leu Arg Gln Glu Ala Leu Glu Met Ser Arg Asn
305 310 315 320
Arg Ile Ala Glu Asn Leu Gly Asp Val Gln Ile Ser Asp Lys Ile Thr
325 330 335
Ile Ser Lys Asn Phe Lys Glu Asn Val Ile Arg Pro Ile Leu Lys Ala
340 345 350
His Phe Arg Arg Asp Glu Phe Leu Gly Arg Ile Asn Glu Ile Val Tyr
355 360 365
Phe Leu Pro Phe Cys His Ser Glu Leu Ile Gln Leu Val Asn Lys Glu
370 375 380
Leu Asn Phe Trp Ala Lys Arg Ala Lys Gln Arg His Asn Ile Thr Leu
385 390 395 400
Leu Trp Asp Arg Glu Val Ala Asp Val Leu Val Asp Gly Tyr Asn Val
405 410 415
His Tyr Gly Ala Arg Ser Ile Lys His Glu Val Glu Arg Arg Val Gly
420 425 430
Asn Gln Leu Ala Ala Ala Tyr Glu Gln Asp Leu Leu Pro Gly Gly Cys

| | | |
|---|-----|-----|
| 435 | 440 | 445 |
| Thr Leu Arg Ile Thr Val Glu Asp Ser Asp Lys Gln Leu Leu Lys Ser | | |
| 450 | 455 | 460 |
| Pro Glu Leu Pro Ser Pro Gln Ala Glu Lys Arg Leu Pro Lys Leu Arg | | |
| 465 | 470 | 475 |
| Leu Glu Ile Ile Asp Lys Asp Ser Lys Thr Arg Arg Leu Asp Ile Arg | | |
| 485 | 490 | 495 |
| Ala Pro Leu His Pro Glu Lys Val Cys Asn Thr Ile | | |
| 500 | 505 | 508 |

<210> 1136
<211> 81
<212>Amino acid
<213> Homo sapiens

| | | |
|---|----|----|
| <400> 1136 | | |
| Ser Ser Cys Asp Arg Glu Arg His Gly Ser Leu Gly Met Met Ser Gly | | |
| 1 | 5 | 10 |
| Ser Phe Ile Leu Cys Leu Ala Leu Val Thr Arg Trp Ser Pro Gln Ala | | |
| 20 | 25 | 30 |
| Ser Ser Val Pro Leu Ala Val Tyr Glu Ser Lys Thr Arg Lys Ser Tyr | | |
| 35 | 40 | 45 |
| Arg Ser Gln Arg Asp Arg Asp Gly Lys Asp Arg Ser Gln Gly Met Gly | | |
| 50 | 55 | 60 |
| Leu Ser Leu Leu Val Glu Thr Arg Lys Leu Leu Leu Ser Ala Asn Gln | | |
| 65 | 70 | 75 |
| Gly | | 80 |
| 81 | | |

<210> 1137
<211> 260
<212>Amino acid
<213> Homo sapiens

| | | |
|---|-----|-----|
| <400> 1137 | | |
| His Thr Pro Met Ala Phe Phe Leu Ser Phe Leu Ser Thr Ser Glu Thr | | |
| 1 | 5 | 10 |
| Val Tyr Thr Phe Val Ile Leu Pro Lys Met Leu Ile Asn Leu Leu Ser | | |
| 20 | 25 | 30 |
| Val Ala Arg Thr Ile Ser Phe Asn Cys Cys Ala Leu Gln Met Phe Phe | | |
| 35 | 40 | 45 |
| Phe Leu Gly Phe Ala Ile Thr Asn Cys Leu Leu Gly Val Met Gly | | |
| 50 | 55 | 60 |
| Tyr Asp Arg Tyr Ala Ala Ile Cys His Pro Leu His Tyr Pro Thr Leu | | |
| 65 | 70 | 75 |
| Met Ser Trp Gln Val Cys Gly Lys Leu Ala Ala Ala Cys Ala Ile Gly | | |
| 85 | 90 | 95 |
| Gly Phe Leu Ala Ser Leu Thr Val Val Asn Leu Val Phe Ser Leu Pro | | |
| 100 | 105 | 110 |
| Phe Cys Ser Thr Asn Lys Val Asn His Tyr Phe Cys Asp Ile Ser Ala | | |
| 115 | 120 | 125 |
| Val Ile Leu Leu Ala Cys Thr Asn Thr Asp Val Asn Gly Phe Val Ile | | |
| 130 | 135 | 140 |
| Phe Ile Cys Gly Val Leu Val Val Pro Phe Leu Phe Ile Cys | | |

| | | | |
|---|-----|-----|-----|
| 145 | 150 | 155 | 160 |
| Val Ser Tyr Phe Cys Ile Leu Arg Thr Ile Leu Lys Ile Pro Ser Ala | | | |
| 165 | 170 | 175 | |
| Glu Gly Arg Arg Lys Ala Phe Ser Thr Cys Ala Ser His Leu Ser Val | | | |
| 180 | 185 | 190 | |
| Val Ile Val His Tyr Gly Cys Ala Ser Phe Ile Tyr Leu Arg Pro Thr | | | |
| 195 | 200 | 205 | |
| Ala Asn Tyr Val Ser Asn Lys Asp Arg Leu Val Thr Val Thr Tyr Thr | | | |
| 210 | 215 | 220 | |
| Ile Val Thr Pro Leu Leu Asn Pro Met Val Tyr Ser Leu Arg Asn Lys | | | |
| 225 | 230 | 235 | 240 |
| Asp Val Gln Leu Ala Ile Arg Lys Val Leu Gly Lys Lys Gly Ser Leu | | | |
| 245 | 250 | 255 | |
| Lys Leu Tyr Asn | | | |
| 260 | | | |

<210> 1138
<211> 393
<212>Amino acid
<213> Homo sapiens

| | | | |
|---|-----|-----|-----|
| <400> 1138 | | | |
| Arg Pro Pro Ala Ala Thr Arg Tyr Pro Arg Glu Lys Leu Lys Ser Met | | | |
| 1 | 5 | 10 | 15 |
| Thr Ser Arg Asp Asn Tyr Lys Ala Gly Ser Arg Glu Ala Ala Ala Ala | | | |
| 20 | 25 | 30 | |
| Ala Ala Ala Ala Val Ala Glu | | | |
| 35 | 40 | 45 | |
| Pro Tyr Pro Val Ser Gly Ala Lys Arg Lys Tyr Leu Glu Asp Ser Asp | | | |
| 50 | 55 | 60 | |
| Pro Glu Arg Ser Asp Tyr Glu Glu Gln Leu Gln Glu Glu Glu Glu | | | |
| 65 | 70 | 75 | 80 |
| Ala Arg Lys Val Lys Ser Gly Ile Arg Gln Met Arg Leu Phe Ser Gln | | | |
| 85 | 90 | 95 | |
| Asp Glu Cys Ala Lys Ile Glu Ala Arg Ile Asp Glu Val Val Ser Arg | | | |
| 100 | 105 | 110 | |
| Ala Glu Lys Gly Leu Tyr Asn Glu His Thr Val Asp Arg Ala Pro Leu | | | |
| 115 | 120 | 125 | |
| Arg Asn Lys Tyr Phe Phe Gly Glu Gly Tyr Thr Tyr Gly Ala Gln Leu | | | |
| 130 | 135 | 140 | |
| Gln Lys Arg Gly Pro Gly Gln Glu Arg Leu Tyr Pro Pro Gly Asp Val | | | |
| 145 | 150 | 155 | 160 |
| Asp Glu Ile Pro Glu Trp Val His Gln Leu Val Ile Gln Lys Leu Val | | | |
| 165 | 170 | 175 | |
| Glu His Arg Val Ile Pro Glu Gly Phe Val Asn Ser Ala Val Ile Asn | | | |
| 180 | 185 | 190 | |
| Asp Tyr Gln Pro Gly Gly Cys Ile Val Ser His Val Asp Pro Ile His | | | |
| 195 | 200 | 205 | |
| Ile Phe Glu Arg Pro Ile Val Ser Val Ser Phe Phe Ser Asp Ser Ala | | | |
| 210 | 215 | 220 | |
| Leu Cys Phe Gly Cys Lys Phe Gln Phe Lys Pro Ile Arg Val Ser Glu | | | |
| 225 | 230 | 235 | 240 |
| Pro Val Leu Ser Leu Pro Val Arg Arg Gly Ser Val Thr Val Leu Ser | | | |
| 245 | 250 | 255 | |
| Gly Tyr Ala Ala Asp Glu Ile Thr His Cys Ile Arg Pro Gln Asp Ile | | | |
| 260 | 265 | 270 | |
| Lys Glu Arg Arg Ala Val Ile Ile Leu Arg Lys Thr Arg Leu Asp Ala | | | |
| 275 | 280 | 285 | |
| Pro Arg Leu Glu Thr Lys Ser Leu Ser Ser Val Leu Pro Pro Ser | | | |

| | | |
|---|-----|-----|
| 290 | 295 | 300 |
| Tyr Ala Ser Asp Arg Leu Ser Gly Asn Asn Arg Asp Pro Ala Leu Lys | 310 | 315 |
| 305 | | 320 |
| Pro Lys Arg Ser His Arg Lys Ala Asp Pro Asp Ala Ala His Arg Pro | 325 | 330 |
| | | 335 |
| Arg Ile Leu Glu Met Asp Lys Glu Glu Asn Arg Arg Ser Val Leu Leu | 340 | 345 |
| | | 350 |
| Pro Thr His Arg Arg Arg Gly Ser Phe Ser Ser Glu Asn Tyr Trp Arg | 355 | 360 |
| | | 365 |
| Lys Ser Tyr Glu Ser Ser Glu Asp Cys Ser Glu Ala Ala Gly Ser Pro | 370 | 375 |
| | | 380 |
| Ala Arg Lys Val Lys Met Arg Arg His | 385 | 390 |
| | | 393 |

<210> 1139
<211> 545
<212>Amino acid
<213> Homo sapiens

| | | |
|---|-----|-----|
| <400> 1139 | | |
| Val Thr Trp His Phe Tyr Phe Cys Ser Asp His Lys Asn Gly His Tyr | 5 | 10 |
| 1 | | 15 |
| Ile Ile Pro Gln Met Ala Asp Arg Ser Arg Gln Lys Cys Met Ser Gln | 20 | 25 |
| | | 30 |
| Ser Leu Asp Leu Ser Glu Leu Ala Lys Ala Ala Lys Lys Lys Leu Gln | 35 | 40 |
| | | 45 |
| Ala Leu Ser Asn Arg Leu Phe Glu Glu Leu Ala Met Asp Val Tyr Asp | 50 | 55 |
| | | 60 |
| Glu Val Asp Arg Arg Glu Asn Asp Ala Val Trp Leu Ala Thr Gln Asn | 65 | 70 |
| | | 80 |
| His Ser Thr Leu Val Thr Glu Arg Ser Ala Val Pro Phe Leu Pro Val | 85 | 90 |
| | | 95 |
| Asn Pro Glu Tyr Ser Ala Thr Arg Asn Gln Gly Arg Gln Lys Leu Ala | 100 | 105 |
| | | 110 |
| Arg Phe Asn Ala Arg Glu Phe Ala Thr Leu Ile Ile Asp Ile Leu Ser | 115 | 120 |
| | | 125 |
| Glu Ala Lys Arg Arg Gln Gln Gly Lys Ser Leu Ser Ser Pro Thr Asp | 130 | 135 |
| | | 140 |
| Asn Leu Glu Leu Ser Leu Arg Ser Gln Ser Asp Leu Asp Asp Gln His | 145 | 150 |
| | | 155 |
| Asp Tyr Asp Ser Val Ala Ser Asp Glu Asp Thr Asp Gln Glu Pro Leu | 165 | 170 |
| | | 175 |
| Arg Ser Thr Gly Ala Thr Arg Ser Asn Arg Ala Arg Ser Met Asp Ser | 180 | 185 |
| | | 190 |
| Ser Asp Leu Ser Asp Gly Ala Val Thr Leu Gln Glu Tyr Leu Glu Leu | 195 | 200 |
| | | 205 |
| Lys Lys Ala Leu Ala Thr Ser Glu Ala Lys Val Gln Gln Leu Met Lys | 210 | 215 |
| | | 220 |
| Val Asn Ser Ser Leu Ser Asp Glu Leu Arg Arg Leu Gln Arg Glu His | 225 | 230 |
| | | 235 |
| Phe Ala Pro Ile Ile His Lys Leu Gln Ala Glu Asn Leu Gln Leu Arg | 245 | 250 |
| | | 255 |
| Gln Pro Pro Gly Pro Val Pro Thr Pro Pro Leu Pro Ser Glu Arg Ala | 260 | 265 |
| | | 270 |
| Glu His Thr Pro Met Ala Pro Gly Gly Ser Thr His Arg Arg Asp Arg | 275 | 280 |
| | | 285 |
| Gln Ala Phe Ser Met Tyr Glu Pro Gly Ser Ala Leu Lys Pro Phe Gly | 290 | 295 |
| | | 300 |
| Gly Pro Pro Gly Asp Glu Leu Thr Thr Arg Leu Gln Pro Phe His Ser | | |

| | | | |
|---|-----|-----|-----|
| 305 | 310 | 315 | 320 |
| Thr Glu Leu Glu Asp Asp Ala Ile Tyr Ser Val His Val Pro Ala Gly | 325 | 330 | 335 |
| Leu Tyr Arg Ile Arg Lys Gly Val Ser Ala Ser Ala Val Pro Phe Thr | 340 | 345 | 350 |
| Pro Ser Ser Pro Leu Leu Ser Cys Ser Gln Glu Gly Ser Arg His Thr | 355 | 360 | 365 |
| Ser Lys Leu Ser Arg His Gly Ser Gly Ala Asp Ser Asp Tyr Glu Asn | 370 | 375 | 380 |
| Thr Gln Ser Gly Asp Pro Leu Leu Gly Leu Glu Gly Lys Arg Phe Leu | 385 | 390 | 395 |
| Glu Leu Gly Lys Glu Glu Asp Phe His Pro Glu Leu Glu Ser Leu Asp | 405 | 410 | 415 |
| Gly Asp Leu Asp Pro Gly Leu Pro Ser Thr Glu Asp Val Ile Leu Lys | 420 | 425 | 430 |
| Thr Glu Gln Val Thr Lys Asn Ile Gln Glu Leu Leu Arg Ala Ala Gln | 435 | 440 | 445 |
| Glu Phe Lys His Asp Ser Phe Val Pro Cys Ser Glu Lys Ile His Leu | 450 | 455 | 460 |
| Ala Val Thr Glu Met Ala Ser Leu Phe Pro Lys Arg Pro Ala Leu Glu | 465 | 470 | 475 |
| Pro Val Arg Ser Ser Leu Arg Leu Leu Asn Ala Ser Ala Tyr Arg Leu | 485 | 490 | 495 |
| Gln Ser Glu Cys Arg Lys Thr Val Pro Pro Glu Pro Gly Ala Pro Val | 500 | 505 | 510 |
| Asp Phe Gln Leu Leu Thr Gln Gln Val Ile Gln Cys Ala Tyr Asp Ile | 515 | 520 | 525 |
| Ala Lys Ala Ala Lys Gln Leu Val Thr Ile Thr Thr Arg Glu Lys Lys | 530 | 535 | 540 |
| Gln | | | |
| 545 | | | |

<210> 1140
 <211> 621
 <212>Amino acid
 <213> Homo sapiens

| |
|---|
| <400> 1140 |
| Arg Tyr Leu Ser Tyr Gly Ser Gly Pro Lys Arg Phe Pro Leu Val Asp |
| 1 5 10 15 |
| Val Leu Gln Tyr Ala Leu Glu Phe Ala Ser Ser Lys Pro Val Cys Thr |
| 20 25 30 |
| Ser Pro Val Asp Asp Ile Asp Ala Ser Ser Pro Pro Ser Gly Ser Ile |
| 35 40 45 |
| Pro Ser Gln Thr Leu Pro Ser Thr Thr Glu Gln Gln Gly Ala Leu Ser |
| 50 55 60 |
| Ser Glu Leu Pro Ser Thr Ser Pro Ser Ser Val Ala Ala Ile Ser Ser |
| 65 70 75 80 |
| Arg Ser Val Ile His Lys Pro Phe Thr Gln Ser Arg Ile Pro Pro Asp |
| 85 90 95 |
| Leu Pro Met His Pro Ala Pro Arg His Ile Thr Glu Glu Glu Leu Ser |
| 100 105 110 |
| Val Leu Glu Ser Cys Leu His Arg Trp Arg Thr Glu Ile Glu Asn Asp |
| 115 120 125 |
| Thr Arg Asp Leu Gln Glu Ser Ile Ser Arg Ile His Arg Thr Ile Glu |
| 130 135 140 |
| Leu Met Tyr Ser Asp Lys Ser Met Ile Gln Val Pro Tyr Arg Leu His |
| 145 150 155 160 |
| Ala Val Leu Val His Glu Gly Gln Ala Asn Ala Gly His Tyr Trp Ala |

| | | | | | | | | | | | | | | | |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Tyr | Ile | Phe | Asp | His | Arg | Glu | Ser | Arg | Trp | Met | Lys | Tyr | Asn | Asp | Ile |
| | | | | | | | | | | | | | | | |
| 165 | | | | | | | | | | | | 170 | | | 175 |
| | | | | | | | | | | | | | | | |
| 180 | | | | | | | | | | | | 185 | | | 190 |
| | | | | | | | | | | | | | | | |
| Ala | Val | Thr | Lys | Ser | Ser | Trp | Glu | Glu | Leu | Val | Arg | Asp | Ser | Phe | Gly |
| | | | | | | | | | | | | | | | |
| 195 | | | | | | | | | | | | 200 | | | 205 |
| | | | | | | | | | | | | | | | |
| Gly | Tyr | Arg | Asn | Ala | Ser | Ala | Tyr | Cys | Leu | Met | Tyr | Ile | Asn | Asp | Lys |
| | | | | | | | | | | | | | | | |
| 210 | | | | | | | | | | | | 215 | | | 220 |
| | | | | | | | | | | | | | | | |
| Ala | Gln | Phe | Leu | Ile | Gln | Glu | Glu | Phe | Asn | Lys | Glu | Thr | Gly | Gln | Pro |
| | | | | | | | | | | | | | | | |
| 225 | | | | | | | | | | | | 230 | | | 235 |
| | | | | | | | | | | | | | | | |
| Leu | Val | Gly | Ile | Glu | Thr | Leu | Pro | Pro | Asp | Leu | Arg | Asp | Phe | Val | Glu |
| | | | | | | | | | | | | | | | |
| 245 | | | | | | | | | | | | 250 | | | 255 |
| | | | | | | | | | | | | | | | |
| Glu | Asp | Asn | Gln | Arg | Phe | Glu | Lys | Glu | Leu | Glu | Glu | Trp | Asp | Ala | Gln |
| | | | | | | | | | | | | | | | |
| 260 | | | | | | | | | | | | 265 | | | 270 |
| | | | | | | | | | | | | | | | |
| Leu | Ala | Gln | Lys | Ala | Leu | Gln | Glu | Lys | Leu | Leu | Ala | Ser | Gln | Lys | Leu |
| | | | | | | | | | | | | | | | |
| 275 | | | | | | | | | | | | 280 | | | 285 |
| | | | | | | | | | | | | | | | |
| Arg | Glu | Ser | Glu | Thr | Ser | Val | Thr | Thr | Ala | Gln | Ala | Ala | Gly | Asp | Pro |
| | | | | | | | | | | | | | | | |
| 290 | | | | | | | | | | | | 295 | | | 300 |
| | | | | | | | | | | | | | | | |
| Lys | Tyr | Leu | Glu | Gln | Pro | Ser | Arg | Ser | Asp | Phe | Ser | Lys | His | Leu | Lys |
| | | | | | | | | | | | | | | | |
| 305 | | | | | | | | | | | | 310 | | | 315 |
| | | | | | | | | | | | | | | | 320 |
| Glu | Glu | Thr | Ile | Gln | Ile | Ile | Thr | Lys | Ala | Ser | His | Glu | His | Glu | Asp |
| | | | | | | | | | | | | 325 | | | 330 |
| | | | | | | | | | | | | | | | 335 |
| Lys | Ser | Pro | Glu | Thr | Val | Leu | Gln | Ser | Ala | Ile | Lys | Leu | Glu | Tyr | Ala |
| | | | | | | | | | | | | 340 | | | 345 |
| | | | | | | | | | | | | | | | 350 |
| Arg | Leu | Val | Lys | Leu | Ala | Gln | Glu | Asp | Thr | Pro | Pro | Glu | Thr | Asp | Tyr |
| | | | | | | | | | | | | 355 | | | 360 |
| | | | | | | | | | | | | | | | 365 |
| Arg | Ieu | His | His | Val | Val | Val | Tyr | Phe | Ile | Gln | Asn | Gln | Ala | Pro | Lys |
| | | | | | | | | | | | | 370 | | | 375 |
| | | | | | | | | | | | | | | | 380 |
| Lys | Ile | Ile | Glu | Lys | Thr | Leu | Leu | Glu | Gln | Phe | Gly | Asp | Arg | Asn | Leu |
| | | | | | | | | | | | | 385 | | | 390 |
| | | | | | | | | | | | | | | | 395 |
| Ser | Phe | Asp | Glu | Arg | Cys | His | Asn | Ile | Met | Lys | Val | Ala | Gln | Ala | Lys |
| | | | | | | | | | | | | 405 | | | 410 |
| | | | | | | | | | | | | | | | 415 |
| Leu | Glu | Met | Ile | Lys | Pro | Glu | Glu | Val | Asn | Leu | Glu | Glu | Tyr | Glu | Glu |
| | | | | | | | | | | | | 420 | | | 425 |
| | | | | | | | | | | | | | | | 430 |
| Trp | His | Gln | Asp | Tyr | Arg | Lys | Phe | Arg | Glu | Thr | Thr | Met | Tyr | Leu | Ile |
| | | | | | | | | | | | | 435 | | | 440 |
| | | | | | | | | | | | | | | | 445 |
| Ile | Gly | Leu | Glu | Asn | Phe | Gln | Arg | Glu | Ser | Tyr | Ile | Asp | Ser | Leu | Leu |
| | | | | | | | | | | | | 450 | | | 455 |
| | | | | | | | | | | | | | | | 460 |
| Phe | Leu | Ile | Cys | Ala | Tyr | Gln | Asn | Asn | Lys | Glu | Leu | Leu | Ser | Lys | Gly |
| | | | | | | | | | | | | 465 | | | 470 |
| | | | | | | | | | | | | | | | 475 |
| Leu | Tyr | Arg | Gly | His | Asp | Glu | Glu | Leu | Ile | Ser | His | Tyr | Arg | Arg | Glu |
| | | | | | | | | | | | | 485 | | | 490 |
| | | | | | | | | | | | | | | | 495 |
| Cys | Leu | Leu | Lys | Leu | Asn | Glu | Gln | Ala | Ala | Glu | Leu | Phe | Glu | Ser | Gly |
| | | | | | | | | | | | | 500 | | | 505 |
| | | | | | | | | | | | | | | | 510 |
| Glu | Asp | Arg | Glu | Val | Asn | Asn | Gly | Leu | Ile | Ile | Met | Asn | Glu | Phe | Ile |
| | | | | | | | | | | | | 515 | | | 520 |
| | | | | | | | | | | | | | | | 525 |
| Val | Pro | Phe | Leu | Pro | Leu | Leu | Leu | Val | Asp | Glu | Met | Glu | Glu | Lys | Asp |
| | | | | | | | | | | | | 530 | | | 535 |
| | | | | | | | | | | | | | | | 540 |
| Ille | Ieu | Ala | Val | Glu | Asp | Met | Arg | Asn | Arg | Trp | Cys | Ser | Tyr | Leu | Gly |
| | | | | | | | | | | | | 545 | | | 550 |
| | | | | | | | | | | | | | | | 555 |
| Gln | Glu | Met | Glu | Pro | His | Leu | Gln | Glu | Lys | Leu | Thr | Asp | Phe | Leu | Pro |
| | | | | | | | | | | | | 565 | | | 570 |
| | | | | | | | | | | | | | | | 575 |
| Lys | Leu | Leu | Asp | Cys | Ser | Met | Glu | Ile | Lys | Ser | Phe | His | Glu | Pro | Pro |
| | | | | | | | | | | | | 580 | | | 585 |
| | | | | | | | | | | | | | | | 590 |
| Lys | Leu | Pro | Ser | Tyr | Ser | Thr | His | Glu | Leu | Cys | Glu | Arg | Phe | Ala | Arg |
| | | | | | | | | | | | | 595 | | | 600 |
| | | | | | | | | | | | | | | | 605 |
| Ile | Met | Leu | Ser | Leu | Ser | Arg | Thr | Pro | Ala | Asp | Gly | Arg | | | |
| | | | | | | | | | | | | 610 | | | 615 |
| | | | | | | | | | | | | | | | 620 |
| | | | | | | | | | | | | | | | 621 |

<210> 1141

<211> 154

<212>Amino acid

<213> Homo sapiens

<400> 1141

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ala | Gln | Val | Tyr | Val | Arg | Met | Asp | Ser | Phe | Asp | Glu | Asp | Leu | Ala | Arg |
| 1 | | | | 5 | | | | | 10 | | | | 15 | | |
| Pro | Ser | Gly | Leu | Leu | Ala | Gln | Glu | Arg | Lys | Leu | Cys | Arg | Asp | Leu | Val |
| | | | | 20 | | | | 25 | | | | 30 | | | |
| His | Ser | Asn | Lys | Lys | Glu | Gln | Glu | Phe | Arg | Ser | Ile | Phe | Gln | His | Ile |
| | | | | 35 | | | | 40 | | | | 45 | | | |
| Gln | Ser | Ala | Gln | Ser | Gln | Arg | Ser | Pro | Ser | Glu | Leu | Phe | Ala | Gln | His |
| | | | | 50 | | | | 55 | | | | 60 | | | |
| Met | Val | Pro | Ile | Val | His | His | Val | Lys | Glu | His | His | Phe | Gly | Ser | Ser |
| | | | | 65 | | | | 70 | | | | 75 | | | 80 |
| Gly | Met | Thr | Leu | His | Glu | Arg | Phe | Thr | Lys | Tyr | Leu | Lys | Arg | Gly | Thr |
| | | | | 85 | | | | 90 | | | | 95 | | | |
| Glu | Gln | Glu | Ala | Ala | Lys | Asn | Lys | Lys | Ser | Pro | Glu | Ile | His | Arg | Arg |
| | | | | 100 | | | | 105 | | | | 110 | | | |
| Ile | Asp | Ile | Ser | Pro | Ser | Thr | Phe | Arg | Lys | His | Gly | Leu | Ala | His | Asp |
| | | | | 115 | | | | 120 | | | | 125 | | | |
| Glu | Met | Lys | Ser | Pro | Arg | Glu | Pro | Gly | Tyr | Lys | Asp | Gly | His | Asn | Ser |
| | | | | 130 | | | | 135 | | | | 140 | | | |
| Lys | Asn | Glu | Leu | Gln | Arg | Val | Asn | Phe | Tyr | | | | | | |
| | | | | 145 | | | | 150 | | | | 154 | | | |

<210> 1142
<211> 121
<212>Amino acid
<213> Homo sapiens

<400> 1142

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Thr | Tyr | Thr | Phe | Cys | Phe | Ser | Leu | Met | Ile | Ile | Leu | Leu | Thr | Ile | Ile |
| 1 | | | | | 5 | | | | 10 | | | | 15 | | |
| Gln | Gly | Leu | Ile | Leu | Glu | Ala | Phe | Gly | Glu | Leu | Arg | Asp | Gln | Leu | Asp |
| | | | | | 20 | | | | 25 | | | | 30 | | |
| Gln | Val | Lys | Glu | Asp | Met | Glu | Thr | Lys | Cys | Phe | Ile | Cys | Gly | Ile | Gly |
| | | | | | 35 | | | | 40 | | | | 45 | | |
| Asn | Asp | Tyr | Phe | Asp | Thr | Val | Pro | His | Gly | Phe | Glu | Thr | His | Thr | Leu |
| | | | | | 50 | | | | 55 | | | | 60 | | |
| Gln | Glu | His | Asn | Leu | Ala | Asn | Tyr | Leu | Phe | Phe | Leu | Met | Tyr | Leu | Ile |
| | | | | 65 | | | | 70 | | | | 75 | | | 80 |
| Asn | Lys | Asp | Glu | Thr | Glu | His | Thr | Gly | Gln | Glu | Ser | Tyr | Val | Trp | Lys |
| | | | | | 85 | | | | 90 | | | | 95 | | |
| Met | Tyr | Gln | Glu | Arg | Cys | Trp | Glu | Phe | Phe | Pro | Ala | Gly | Asp | Cys | Phe |
| | | | | | 100 | | | | 105 | | | | 110 | | |
| Arg | Lys | Gln | Tyr | Glu | Asp | Gln | Ile | Asn | | | | | | | |
| | | | | | 115 | | | | 120 | | | | 121 | | |

<210> 1143
<211> 851
<212>Amino acid
<213> Homo sapiens

<400> 1143
 Phe Arg Arg Lys Gly Gly Gly Pro Lys Asp Phe Gly Ala Gly Leu
 1 5 10 15
 Lys Tyr Asn Ser Arg His Glu Lys Val Asn Gly Leu Glu Glu Gly Val
 20 25 30
 Glu Phe Leu Pro Val Asn Asn Val Lys Lys Val Glu Lys His Gly Pro
 35 40 45
 Gly Arg Trp Val Val Leu Ala Ala Val Leu Ile Gly Leu Leu Leu Val
 50 55 60
 Leu Leu Gly Ile Gly Phe Leu Val Trp His Leu Gln Tyr Arg Asp Val
 65 70 75 80
 Arg Val Gln Lys Val Phe Asn Gly Tyr Met Arg Ile Thr Asn Glu Asn
 85 90 95
 Phe Val Asp Ala Tyr Glu Asn Ser Asn Ser Thr Glu Phe Val Ser Leu
 100 105 110
 Ala Ser Lys Val Lys Asp Ala Leu Lys Leu Leu Tyr Ser Gly Val Pro
 115 120 125
 Phe Leu Gly Pro Tyr His Lys Glu Ser Ala Val Thr Ala Phe Ser Glu
 130 135 140
 Gly Ser Val Ile Ala Tyr Tyr Trp Ser Glu Phe Ser Ile Pro Gln His
 145 150 155 160
 Leu Val Glu Ala Glu Arg Val Met Ala Glu Glu Arg Val Val Met
 165 170 175
 Leu Pro Pro Arg Ala Arg Ser Leu Lys Ser Phe Val Val Thr Ser Val
 180 185 190
 Val Ala Phe Pro Thr Asp Ser Lys Thr Val Gln Arg Thr Gln Asp Asn
 195 200 205
 Ser Cys Ser Phe Gly Leu His Ala Arg Gly Val Glu Leu Met Arg Phe
 210 215 220
 Thr Thr Pro Gly Phe Pro Asp Ser Pro Tyr Pro Ala His Ala Arg Cys
 225 230 235 240
 Gln Trp Ala Leu Arg Gly Asp Ala Asp Ser Val Leu Ser Leu Thr Phe
 245 250 255
 Arg Ser Phe Asp Leu Ala Ser Cys Asp Glu Arg Gly Arg His Leu Val
 260 265 270
 Thr Val Tyr Asn Thr Leu Ser Pro Met Glu Pro His Ala Leu Val Gln
 275 280 285
 Leu Cys Gly Thr Tyr Pro Pro Ser Tyr Asn Leu Thr Phe His Ser Ser
 290 295 300
 Gln Asn Val Leu Leu Ile Thr Leu Ile Thr Asn Thr Glu Arg Arg His
 305 310 315 320
 Pro Gly Phe Glu Ala Thr Phe Phe Gln Leu Pro Arg Met Ser Ser Cys
 325 330 335
 Gly Gly Arg Leu Arg Lys Ala Gln Gly Thr Phe Asn Ser Pro Tyr Tyr
 340 345 350
 Pro Gly His Tyr Pro Pro Asn Ile Asp Cys Thr Trp Asn Ile Glu Val
 355 360 365
 Pro Asn Asn Gln His Val Lys Val Arg Phe Lys Phe Phe Tyr Leu Leu
 370 375 380
 Glu Pro Gly Val Pro Ala Gly Thr Cys Pro Lys Asp Tyr Val Glu Ile
 385 390 395 400
 Asn Gly Glu Lys Tyr Cys Gly Glu Arg Ser Gln Phe Val Val Thr Ser
 405 410 415
 Asn Ser Asn Lys Ile Thr Val Arg Phe His Ser Asp Gln Ser Tyr Thr
 420 425 430
 Asp Thr Gly Phe Leu Ala Glu Tyr Leu Ser Tyr Asp Ser Ser Asp Pro
 435 440 445
 Cys Pro Gly Gln Phe Thr Cys Arg Thr Gly Arg Cys Ile Arg Lys Glu
 450 455 460
 Leu Arg Cys Asp Gly Trp Ala Asp Cys Thr Asp His Ser Asp Glu Leu
 465 470 475 480
 Asn Cys Ser Cys Asp Ala Gly His Gln Phe Thr Cys Lys Asn Lys Phe
 485 490 495
 Cys Lys Pro Leu Phe Trp Val Cys Asp Ser Leu Asn Asp Cys Gly Asp

| | | | |
|---|-----|---------------------------------|-----|
| Asn Ser Asp Glu Gln Gly Cys Ser | 500 | Cys Pro Ala Gln Thr Phe Arg Cys | 510 |
| 515 | 520 | 525 | |
| Ser Asn Gly Lys Cys Leu Ser Lys Ser Gln Gln Cys Asn Gly Lys Asp | 530 | 535 | 540 |
| Asp Cys Gly Asp Gly Ser Asp Glu Ala Ser Cys Pro Lys Val Asn Val | 545 | 550 | 555 |
| 560 | | | |
| Val Thr Cys Thr Lys His Thr Tyr Arg Cys Leu Asn Gly Leu Cys Leu | 565 | 570 | 575 |
| Ser Lys Gly Asn Pro Glu Cys Asp Gly Lys Glu Asp Cys Ser Asp Gly | 580 | 585 | 590 |
| Ser Asp Glu Lys Asp Cys Asp Cys Gly Leu Arg Ser Phe Thr Arg Gln | 595 | 600 | 605 |
| Ala Arg Val Val Gly Gly Thr Asp Ala Asp Glu Gly Glu Trp Pro Trp | 610 | 615 | 620 |
| Gln Val Ser Leu His Ala Leu Gly Gln Gly His Ile Cys Gly Ala Ser | 625 | 630 | 635 |
| 640 | | | |
| Leu Ile Ser Pro Asn Trp Leu Val Ser Ala Ala His Cys Tyr Ile Asp | 645 | 650 | 655 |
| Asp Arg Gly Phe Arg Tyr Ser Asp Pro Thr Gln Trp Thr Ala Phe Leu | 660 | 665 | 670 |
| Gly Leu His Asp Gln Ser Gln Arg Ser Ala Pro Gly Val Gln Glu Arg | 675 | 680 | 685 |
| Arg Leu Lys Arg Ile Ile Ser His Pro Phe Phe Asn Asp Phe Thr Phe | 690 | 695 | 700 |
| Asp Tyr Asp Ile Ala Leu Leu Glu Leu Glu Lys Pro Ala Glu Tyr Ser | 705 | 710 | 715 |
| 720 | | | |
| Ser Met Val Arg Pro Ile Cys Leu Pro Asp Ala Ser His Val Phe Pro | 725 | 730 | 735 |
| Ala Gly Lys Ala Ile Trp Val Thr Gly Trp Gly His Thr Gln Tyr Gly | 740 | 745 | 750 |
| Gly Thr Gly Ala Leu Ile Leu Gln Lys Gly Glu Ile Arg Val Ile Asn | 755 | 760 | 765 |
| Gln Thr Thr Cys Glu Asn Leu Pro Gln Gln Ile Thr Pro Arg Met | 770 | 775 | 780 |
| Met Cys Val Gly Phe Leu Ser Gly Gly Val Asp Ser Cys Gln Gly Asp | 785 | 790 | 795 |
| 800 | | | |
| Ser Gly Gly Pro Leu Ser Ser Val Glu Ala Asp Gly Arg Ile Phe Gln | 805 | 810 | 815 |
| Ala Gly Val Val Ser Trp Gly Asp Gly Cys Ala Gln Arg Asn Lys Pro | 820 | 825 | 830 |
| Gly Val Tyr Thr Arg Leu Pro Leu Phe Arg Asp Trp Ile Lys Glu Asn | 835 | 840 | 845 |
| Thr Gly Val | 850 | 851 | |

<210> 1144
 <211> 346
 <212>Amino acid
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(346)
 <223> X = any amino acid or stop code

| | | | | |
|---|---|---|----|----|
| <400> 1144 | | | | |
| Arg His Glu Glu Asp Leu Gly Asn Leu Trp Glu Asn Thr Arg Phe Thr | 1 | 5 | 10 | 15 |

Asp Cys Ser Phe Val Arg Gly Gln Glu Phe Lys Ala His Lys Ser
 20 25 30
 Val Leu Ala Ala Arg Ser Pro Val Phe Asn Ala Met Phe Glu His Glu
 35 40 45
 Met Glu Glu Ser Lys Lys Asn Arg Val Glu Ile Asn Asp Leu Asp Pro
 50 55 60
 Glu Val Phe Lys Glu Met Met Arg Phe Ile Tyr Thr Gly Arg Ala Pro
 65 70 75 80
 Asn Leu Asp Lys Met Ala Asp Asn Leu Leu Ala Ala Asp Lys Tyr
 85 90 95
 Ala Leu Glu Arg Leu Lys Val Met Cys Glu Lys Ala Leu Cys Ser Asn
 100 105 110
 Leu Ser Val Glu Asn Val Ala Asp Thr Leu Val Leu Ala Asp Leu His
 115 120 125
 Ser Ala Glu Gln Leu Lys Ala Gln Ala Ile Asp Phe Ile Asn Arg Cys
 130 135 140
 Ser Val Leu Arg Gln Leu Gly Cys Lys Asp Gly Lys Asn Trp Asn Ser
 145 150 155 160
 Asn Gln Ala Thr Asp Ile Met Glu Thr Ser Gly Gly Lys Ser Met Ile
 165 170 175
 Gln Ser His Pro His Leu Val Ala Glu Ala Phe Arg Ala Leu Ala Ser
 180 185 190
 Ala Gln Gly Pro Gln Phe Gly Ile Pro Arg Lys Arg Leu Lys Gln Ser
 195 200 205
 Xaa Asn Leu Gly Asn Leu Trp Glu Asn Thr Arg Phe Thr Asp Cys Ser
 210 215 220
 Phe Phe Val Arg Gly Gln Glu Phe Lys Ala His Lys Ser Val Leu Ala
 225 230 235 240
 Ala Arg Ser Pro Val Phe Asn Ala Met Phe Glu His Glu Met Glu Glu
 245 250 255
 Ser Lys Lys Asn Arg Val Glu Ile Asn Asp Leu Asp Pro Glu Val Phe
 260 265 270
 Lys Glu Met Met Arg Phe Ile Tyr Thr Gly Arg Ala Pro Asn Leu Asp
 275 280 285
 Lys Met Ala Asp Asn Leu Leu Ala Ala Asp Lys Tyr Ala Leu Glu
 290 295 300
 Arg Leu Lys Val Met Cys Glu Lys Ala Leu Cys Ser Asn Leu Ser Val
 305 310 315 320
 Glu Asn Val Ala Asp Thr Leu Val Leu Ala Asp Leu His Ser Gly Arg
 325 330 335
 Thr Val Glu Ser Thr Ser His Arg Leu Tyr
 340 345 346

<210> 1145

<211> 339

<212> Amino acid

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(339)

<223> X = any amino acid or stop code

<400> 1145
 Gln Arg Gly Gly Ile Pro Gly Lys Phe Gln Glu Asp Ser Gly Ser Val
 1 5 10 15
 Asp Trp Ala Leu Gly Pro Phe Trp Gly Ile Phe Gln Ala Asp Phe Gly
 20 25 30
 Cys Met Arg Phe Tyr Leu Ser Ala Gln Thr Ser Asp Pro Val Leu Arg

| | | |
|---|-----|-----|
| 35 | 40 | 45 |
| Met Xaa Trp Gly Pro Ser Pro Ile Ser His Pro Thr Ser Leu Cys Pro | | |
| 50 | .55 | 60 |
| Gly Gly Gly Ala Gly Gln Thr Thr Gly Ser Leu Cys Leu Gly Gln | | |
| 65 | 70 | 75 |
| Gln Cys Cys Pro Leu Ser Cys Pro Asn Ile Pro Ser Arg His Lys Arg | | 80 |
| 85 | 90 | 95 |
| Trp Arg Leu Xaa Ala Ala Leu Val Ala Gly Ser Arg Gly Ser Cys Thr | | |
| 100 | 105 | 110 |
| Leu Arg Ser Xaa Arg Xaa Arg Thr Pro Leu Pro Val Thr Arg Asn Leu | | |
| 115 | 120 | 125 |
| Pro Arg Cys His Leu His Leu His Pro Thr Gly Asp Leu Arg Val His | | |
| 130 | 135 | 140 |
| Val His Gln His Cys Leu Leu His Gly His Val Pro Pro Gly Ala Ala | | |
| 145 | 150 | 155 |
| Leu Leu Gln Cys Gly Gly Cys Asp Leu Arg Gly Glu Ala Ala Gly Leu | | 160 |
| 165 | 170 | 175 |
| Leu Phe Leu Gly His Ala Cys Leu Arg Gly Ser Val Asn Leu Arg Arg | | |
| 180 | 185 | 190 |
| Asp Gln Trp Leu Pro Val Pro Tyr Ser Arg Leu Cys Phe Ser Gly Ala | | |
| 195 | 200 | 205 |
| Arg Glu Gly His Leu Pro Ser Leu Leu Ala Met Ile His Val Arg His | | |
| 210 | 215 | 220 |
| Cys Thr Pro Ile Pro Ala Leu Leu Val Cys Pro Ile Lys Val Asn Leu | | |
| 225 | 230 | 235 |
| Leu Ile Pro Val Ala Tyr Leu Val Phe Trp Ala Phe Leu Leu Val Phe | | 240 |
| 245 | 250 | 255 |
| Ser Phe Ile Ser Glu His Met Val Cys Gly Val Gly Val Ile Ile Ile | | |
| 260 | 265 | 270 |
| Leu Thr Gly Val Pro Ile Phe Phe Leu Gly Val Phe Trp Arg Ser Lys | | |
| 275 | 280 | 285 |
| Pro Lys Cys Val His Arg Leu Thr Glu Ser Met Thr His Trp Gly Gln | | |
| 290 | 295 | 300 |
| Glu Leu Cys Phe Val Val Tyr Pro Gln Asp Ala Pro Glu Glu Glu | | |
| 305 | 310 | 315 |
| Asn Gly Pro Cys Pro Pro Ser Leu Leu Pro Ala Thr Asp Lys Pro Ser | | 320 |
| 325 | 330 | 335 |
| Lys Pro Gln | | |
| 339 | | |

<210> 1146
<211> 425
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(425)
<223> X = any amino acid or stop code

| | | | |
|---|----|----|----|
| 1 | 5 | 10 | 15 |
| His Leu Pro Val Gly Cys Val Ser Phe Gln Asn Ile Ser Ser Asn Val | | | |
| 20 | 25 | 30 | |
| Leu Glu Glu Ser Ala Ile Ser Asp Asp Ile Leu Ser Pro Asp Glu Glu | | | |
| 35 | 40 | 45 | |
| Gly Phe Cys Ser Gly Lys His Phe Thr Glu Leu Gly Leu Val Gly Leu | | | |
| 50 | 55 | 60 | |

Leu Glu Gln Ala Ala Gly Tyr Phe Thr Met Gly Gly Leu Tyr Glu Ala
 65 70 75 80
 Val Asn Glu Val Tyr Lys Asn Leu Ile Pro Ile Leu Glu Ala His Arg
 85 90 95
 Asp Tyr Lys Lys Leu Ala Ala Val His Gly Lys Leu Gln Glu Ala Phe
 100 105 110
 Thr Lys Ile Met His Gln Ser Ser Gly Trp Glu Arg Val Phe Gly Thr
 115 120 125
 Tyr Phe Arg Val Gly Phe Tyr Gly Ala His Phe Gly Asp Leu Asp Glu
 130 135 140
 Gln Glu Phe Val Tyr Lys Glu Pro Ser Ile Thr Lys Leu Ala Glu Ile
 145 150 155 160
 Ser His Arg Leu Glu Glu Phe Tyr Thr Glu Arg Phe Gly Asp Asp Val
 165 170 175
 Val Glu Ile Ile Lys Asp Ser Asn Pro Val Asp Lys Ser Lys Leu Asp
 180 185 190
 Ser Gln Lys Ala Tyr Ile Gln Ile Thr Tyr Val Glu Pro Tyr Phe Asp
 195 200 205
 Thr Tyr Glu Leu Lys Asp Arg Val Thr Tyr Phe Asp Arg Asn Tyr Gly
 210 215 220
 Leu Arg Thr Phe Leu Phe Cys Thr Pro Phe Thr Pro Asp Gly Arg Ala
 225 230 235 240
 His Gly Glu Leu Pro Glu Gln His Lys Arg Lys Thr Leu Leu Ser Thr
 245 250 255
 Asp His Ala Phe Pro Tyr Ile Lys Thr Arg Ile Arg Val Cys His Arg
 260 265 270
 Glu Glu Thr Val Leu Thr Pro Val Glu Val Ala Ile Glu Asp Met Gln
 275 280 285
 Lys Lys Thr Arg Glu Leu Ala Phe Ala Thr Glu Gln Asp Pro Pro Asp
 290 295 300
 Ala Lys Met Leu Gln Met Val Leu Gln Gly Ser Val Gly Pro Thr Val
 305 310 315 320
 Asn Gln Gly Pro Leu Glu Val Ala Gln Val Phe Leu Ala Glu Ile Pro
 325 330 335
 Glu Asp Pro Lys Leu Phe Arg His His Asn Lys Leu Arg Leu Cys Phe
 340 345 350
 Lys Asp Phe Xaa Lys Lys Cys Glu Asp Ala Leu Arg Lys Asn Lys Ala
 355 360 365
 Leu Ile Gly Pro Asp Gln Lys Glu Tyr His Arg Glu Leu Glu Arg Asn
 370 375 380
 Tyr Cys Arg Leu Arg Glu Ala Leu Gln Pro Leu Leu Thr Gln Arg Leu
 385 390 395 400
 Pro Gln Leu Met Ala Pro Thr Pro Pro Gly Leu Arg Asn Ser Leu Asn
 405 410 415
 Arg Ala Ser Phe Arg Lys Ala Asp Leu
 420 425

<210> 1147
 <211> 198
 <212>Amino acid
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> {1}...{198}
 <223> X = any amino acid or stop code

<400> 1147
 Gly Glu Gly Gln Gln Trp Gln Ser Thr Pro Leu Ser Pro Leu Gln Pro

| | | | |
|---|-----|-----|-----|
| 1 | 5 | 10 | 15 |
| Thr Val Ala Asp Phe Leu Asn Leu Ala Trp Trp Thr Ser Ala Ala Ala | | | |
| 20 | 25 | 30 | |
| Trp Xaa Val Leu Ser Gly Arg Trp Val Glu Lys Val Leu Pro Gly Arg | | | |
| 35 | 40 | 45 | |
| Glu Gly Ser Glu Glu Lys Xaa Gly Met Ala Ser Ser Ala Asp His | | | |
| 50 | 55 | 60 | |
| Leu His Ser Ala Pro Arg Ala Leu Gln Ser Leu Phe Gln Gln Leu Leu | | | |
| 65 | 70 | 75 | 80 |
| Tyr Gly Leu Ile Tyr His Ser Trp Phe Gln Ala Gly Arg Xaa Gly Phe | | | |
| 85 | 90 | 95 | |
| Gly Gly Ala Ser Ser Ser Pro Gly Pro Gln Ser Glu Leu Arg Arg Leu | | | |
| 100 | 105 | 110 | |
| His Gly Glu Gly Val Tyr Asp Xaa Gly Arg Pro Glu Thr Leu Pro | | | |
| 115 | 120 | 125 | |
| Gly Ser Val Gly Gly Ala Glu Ala Leu Trp Ala Leu Ala Asp Pro Ala | | | |
| 130 | 135 | 140 | |
| Glu Ala Glu Gly Ser Pro Glu Thr Arg Glu Ser Ser Cys Val Met Lys | | | |
| 145 | 150 | 155 | 160 |
| Gln Thr Gln Tyr Tyr Phe Gly Ser Val Asn Ala Ser Tyr Asn Ala Ile | | | |
| 165 | 170 | 175 | |
| Ile Asp Cys Gly Asn Cys Ser Arg Cys Trp Gln Trp Gly Gly Thr Arg | | | |
| 180 | 185 | 190 | |
| Gly Gln Gly Arg Asn Leu | | | |
| 195 | 198 | | |

<210> 1148
<211> 317
<212>Amino acid
<213> Homo sapiens

| | | | |
|---|-----|-----|-----|
| 1 | 5 | 10 | 15 |
| Val Ala Gly Ile Pro Ala Cys Phe Asp Asn Phe Thr Glu Ala Leu Ala | | | |
| 20 | 25 | 30 | |
| Glu Thr Ala Cys Arg Gln Met Gly Tyr Ser Ser Lys Pro Thr Phe Arg | | | |
| 35 | 40 | 45 | |
| Ala Val Glu Ile Gly Pro Asp Gln Asp Leu Asp Val Val Glu Ile Thr | | | |
| 50 | 55 | 60 | |
| Glu Asn Ser Gln Glu Leu Arg Met Arg Asn Ser Ser Gly Pro Cys Leu | | | |
| 65 | 70 | 75 | 80 |
| Ser Gly Ser Leu Val Ser Leu His Cys Leu Ala Cys Gly Glu Ser Leu | | | |
| 85 | 90 | 95 | |
| Lys Thr Pro Arg Val Val Gly Gly Glu Ala Ser Val Asp Ser Trp | | | |
| 100 | 105 | 110 | |
| Pro Trp Gln Val Ser Ile Gln Tyr Asp Lys Gln His Val Cys Gly Gly | | | |
| 115 | 120 | 125 | |
| Ser Ile Leu Asp Pro His Trp Val Leu Thr Ala Ala His Cys Phe Arg | | | |
| 130 | 135 | 140 | |
| Lys His Thr Asp Val Phe Asn Trp Lys Val Arg Ala Gly Ser Asp Lys | | | |
| 145 | 150 | 155 | 160 |
| Leu Gly Ser Phe Pro Ser Leu Ala Val Ala Lys Ile Ile Ile Ile Glu | | | |
| 165 | 170 | 175 | |
| Phe Asn Pro Met Tyr Pro Lys Asp Asn Asp Ile Ala Leu Met Lys Leu | | | |
| 180 | 185 | 190 | |
| Gln Phe Pro Leu Thr Phe Ser Gly Thr Val Arg Pro Ile Cys Leu Pro | | | |
| 195 | 200 | 205 | |
| Phe Phe Asp Glu Glu Leu Thr Pro Ala Thr Pro Leu Trp Ile Ile Gly | | | |
| Trp Gly Phe Thr Lys Gln Asn Gly Gly Lys Met Ser Asp Ile Leu Leu | | | |

| | | | | |
|---|-----|-----|-----|-----|
| 210 | 215 | 220 | | |
| Gln Ala Ser Val Gln Val Ile Asp Ser Thr Arg Cys Asn Ala Asp Asp | 225 | 230 | 235 | 240 |
| Ala Tyr Gln Gly Glu Val Thr Glu Lys Met Met Cys Ala Gly Ile Pro | 245 | 250 | 255 | |
| Glu Gly Val Asp Thr Cys Gln Gly Asp Ser Gly Gly Pro Leu Met | 260 | 265 | 270 | |
| Tyr Gln Ser Asp Gln Trp His Val Val Gly Ile Val Ser Trp Gly Tyr | 275 | 280 | 285 | |
| Gly Cys Gly Gly Pro Ser Thr Pro Gly Val Tyr Thr Lys Val Ser Ala | 290 | 295 | 300 | |
| Tyr Leu Asn Trp Ile Tyr Asn Val Trp Lys Ala Glu Leu | 305 | 310 | 315 | 317 |

<210> 1149
<211> 320
<212>Amino acid
<213> Homo sapiens

| | | | | |
|---|-----|-----|-----|-----|
| <400> 1149 | | | | |
| Thr Ile Ser Thr Val Val Arg Trp Asn Ser Arg Ile Gly Met Val Leu Gly | 1 | 5 | 10 | 15 |
| Val Ala Ile Gln Lys Arg Ala Val Pro Gly Leu Tyr Ala Phe Glu Glu | 20 | 25 | 30 | |
| Ala Tyr Ala Arg Ala Asp Lys Glu Ala Pro Arg Pro Cys His Lys Gly | 35 | 40 | 45 | |
| Ser Trp Cys Ser Ser Asn Gln Leu Cys Arg Glu Cys Gln Ala Phe Met | 50 | 55 | 60 | |
| Ala His Thr Met Pro Lys Leu Lys Ala Phe Ser Met Ser Ser Ala Tyr | 65 | 70 | 75 | 80 |
| Asn Ala Tyr Arg Ala Val Tyr Ala Val Ala His Gly Leu His Gln Leu | 85 | 90 | 95 | |
| Leu Gly Cys Ala Ser Gly Ala Cys Ser Arg Gly Arg Val Tyr Pro Trp | 100 | 105 | 110 | |
| Gln Leu Leu Glu Gln Ile His Lys Val His Phe Leu Leu His Lys Asp | 115 | 120 | 125 | |
| Thr Val Ala Phe Asn Asn Arg Asp Pro Leu Ser Ser Tyr Asn Ile | 130 | 135 | 140 | |
| Ile Ala Trp Asp Trp Asn Gly Pro Lys Trp Thr Phe Thr Val Leu Gly | 145 | 150 | 155 | 160 |
| Ser Ser Thr Trp Ser Pro Val Gln Leu Asn Ile Asn Glu Thr Lys Ile | 165 | 170 | 175 | |
| Gln Trp His Gly Lys Asp Asn Gln Val Pro Lys Ser Val Cys Ser Ser | 180 | 185 | 190 | |
| Asp Cys Leu Glu Gly His Gln Arg Val Val Thr Gly Phe His His Cys | 195 | 200 | 205 | |
| Cys Phe Glu Cys Val Pro Cys Gly Ala Gly Thr Phe Leu Asn Lys Ser | 210 | 215 | 220 | |
| Ser Tyr Leu Gly Lys Asp Leu Pro Glu Asn Tyr Asn Glu Ala Lys Cys | 225 | 230 | 235 | 240 |
| Val Thr Phe Ser Leu Leu Phe Asn Phe Val Ser Trp Ile Ala Phe Phe | 245 | 250 | 255 | |
| Thr Thr Ala Ser Val Phe Asp Gly Lys Tyr Leu Pro Ala Ala Asn Met | 260 | 265 | 270 | |
| Met Ala Gly Leu Ser Ser Leu Ser Ser Gly Phe Gly Gly Tyr Phe Leu | 275 | 280 | 285 | |
| Pro Lys Cys Tyr Val Ile Leu Cys Arg Pro Asp Leu Asn Ser Thr Glu | 290 | 295 | 300 | |
| His Phe Gln Ala Ser Ile Gln Asp Tyr Thr Arg Arg Cys Gly Ser Thr | | | | |

305

310

315

320

<210> 1150
<211> 458
<212>Amino acid
<213> Homo sapiens

<400> 1150
Val Ala Arg Gly Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
1 5 10 15
Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
20 25 30
Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
35 40 45
His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
50 55 60
Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val Ile
65 70 75 80
Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
85 90 95
Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
100 105 110
Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
115 120 125
Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
130 135 140
Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
145 150 155 160
Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
165 170 175
Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
180 185 190
Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
195 200 205
Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
210 215 220
Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
225 230 235 240
Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
245 250 255
Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
260 265 270
Thr Ala Gly Ala Gly Ala Thr Gly Gly Ile Ile Gly Gly Ile Ile Ala
275 280 285
Ala Ile Ile Ala Thr Ala Asp Ala Thr Gly Ile Leu Ile Cys Arg Gln
290 295 300
Gln Arg Lys Glu Gln Thr Leu Gln Gly Ala Glu Asp Glu Asp Leu
305 310 315 320
Glu Gly Pro Pro Ser Tyr Lys Pro Pro Thr Pro Lys Ala Lys Leu Glu
325 330 335
Ala Gln Glu Met Pro Ser Gln Leu Phe Thr Leu Gly Ala Ser Glu His
340 345 350
Ser Pro Leu Lys Thr Pro Tyr Phe Asp Ala Gly Ala Ser Cys Thr Glu
355 360 365
Gln Glu Met Pro Arg Tyr His Glu Leu Pro Thr Leu Glu Glu Arg Ser
370 375 380
Gly Pro Leu His Pro Gly Ala Thr Ser Leu Gly Ser Pro Ile Pro Val

| | | | |
|---|-----|-----|-----|
| 385 | 390 | 395 | 400 |
| Pro Pro Gly Pro Pro Ala Val Glu Asp Val Ser Leu Asp Leu Glu Asp | | | |
| 405 | 410 | 415 | |
| Glu Glu Gly Glu Glu Glu Glu Tyr Leu Asp Lys Ile Asn Pro Ile | | | |
| 420 | 425 | 430 | |
| Tyr Asp Ala Leu Ser Tyr Ser Ser Pro Ser Asp Ser Tyr Gln Gly Lys | | | |
| 435 | 440 | 445 | |
| Gly Phe Val Met Ser Arg Ala Met Tyr Val | 455 | 458 | |
| 450 | | | |

<210> 1151
<211> 608
<212>Amino acid
<213> Homo sapiens

| | | | |
|---|-----|-----|-----|
| <400> 1151 | | | |
| Gly Thr Arg Leu Arg Glu Asp Lys Asn His Asn Met Tyr Val Ala Gly | | | |
| 1 | 5 | 10 | 15 |
| Cys Thr Glu Val Glu Val Lys Ser Thr Glu Ala Phe Glu Val Phe | | | |
| 20 | 25 | 30 | |
| Trp Arg Gly Gln Iys Lys Arg Arg Ile Ala Asn Thr His Leu Asn Arg | | | |
| 35 | 40 | 45 | |
| Glu Ser Ser Arg Ser His Ser Val Phe Asn Ile Lys Leu Val Gln Ala | | | |
| 50 | 55 | 60 | |
| Pro Leu Asp Ala Asp Gly Asp Asn Val Leu Gln Glu Lys Glu Gln Ile | | | |
| 65 | 70 | 75 | 80 |
| Thr Ile Ser Gln Leu Ser Leu Val Asp Leu Ala Gly Ser Glu Arg Thr | | | |
| 85 | 90 | 95 | |
| Asn Arg Thr Arg Ala Glu Gly Asn Arg Leu Arg Glu Ala Gly Asn Ile | | | |
| 100 | 105 | 110 | |
| Asn Gln Ser Leu Met Thr Leu Arg Thr Cys Met Asp Val Leu Arg Glu | | | |
| 115 | 120 | 125 | |
| Asn Gln Met Tyr Gly Thr Asn Lys Met Val Pro Tyr Arg Asp Ser Lys | | | |
| 130 | 135 | 140 | |
| Leu Thr His Leu Phe Lys Asn Tyr Phe Asp Gly Glu Lys Val Arg | | | |
| 145 | 150 | 155 | 160 |
| Met Ile Val Cys Val Asn Pro Lys Ala Glu Asp Tyr Glu Glu Asn Leu | | | |
| 165 | 170 | 175 | |
| Gln Val Met Arg Phe Ala Glu Val Thr Gln Glu Val Glu Val Ala Arg | | | |
| 180 | 185 | 190 | |
| Pro Val Asp Lys Ala Ile Cys Gly Leu Thr Pro Gly Arg Arg Tyr Arg | | | |
| 195 | 200 | 205 | |
| Asn Gln Pro Arg Gly Pro Ile Gly Asn Glu Pro Leu Val Thr Asp Val | | | |
| 210 | 215 | 220 | |
| Val Leu Gln Ser Phe Pro Pro Leu Pro Ser Cys Glu Ile Leu Asp Ile | | | |
| 225 | 230 | 235 | 240 |
| Asn Asp Glu Gln Thr Leu Pro Arg Leu Ile Glu Ala Leu Glu Lys Arg | | | |
| 245 | 250 | 255 | |
| His Asn Leu Arg Gln Met Met Ile Asp Glu Phe Asn Lys Gln Ser Asn | | | |
| 260 | 265 | 270 | |
| Ala Phe Lys Ala Leu Leu Gln Glu Phe Asp Asn Ala Val Leu Ser Lys | | | |
| 275 | 280 | 285 | |
| Glu Asn His Met Gln Gly Lys Leu Asn Glu Lys Glu Lys Met Ile Ser | | | |
| 290 | 295 | 300 | |
| Gly Gln Lys Leu Glu Ile Glu Arg Leu Glu Lys Lys Asn Lys Thr Leu | | | |
| 305 | 310 | 315 | 320 |
| Glu Tyr Lys Ile Glu Ile Leu Glu Lys Thr Thr Ile Tyr Glu Glu | | | |
| 325 | 330 | 335 | |
| Asp Lys Arg Asn Leu Gln Gln Glu Leu Glu Thr Gln Asn Gln Lys Leu | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gln | Arg | Gln | Phe | Ser | Asp | Lys | Arg | Arg | Leu | Glu | Ala | Arg | Leu | Gln | Gly |
| 340 | | | | | | 345 | | | | | | 350 | | | |
| 355 | | | | | | 360 | | | | | | 365 | | | |
| Met | Val | Thr | Glu | Thr | Thr | Met | Lys | Trp | Glu | Lys | Glu | Cys | Glu | Arg | Arg |
| 370 | | | | | | 375 | | | | | | 380 | | | |
| Val | Ala | Ala | Lys | Gln | Leu | Gl | Met | Gln | Asn | Lys | Leu | Trp | Val | Lys | Asp |
| 385 | | | | | | 390 | | | | | | 395 | | | 400 |
| Glu | Lys | Leu | Lys | Gln | Leu | Lys | Ala | Ile | Val | Thr | Glu | Pro | Lys | Thr | Glu |
| 405 | | | | | | 410 | | | | | | | 415 | | |
| Lys | Pro | Glu | Arg | Pro | Ser | Arg | Glu | Arg | Asp | Arg | Glu | lys | Val | Thr | Gln |
| 420 | | | | | | 425 | | | | | | | 430 | | |
| Arg | Ser | Val | Ser | Pro | Ser | Pro | Val | Pro | Leu | Leu | Phe | Gln | Pro | Asp | Gln |
| 435 | | | | | | 440 | | | | | | | 445 | | |
| Asn | Ala | Pro | Pro | Ile | Arg | Leu | Arg | His | Arg | Arg | Ser | Arg | Ser | Ala | Gly |
| 450 | | | | | | 455 | | | | | | 460 | | | |
| Asp | Arg | Trp | Val | Asp | His | Lys | Pro | Ala | Ser | Asn | Met | Gln | Thr | Glu | Thr |
| 465 | | | | | | 470 | | | | | | 475 | | | 480 |
| Val | Met | Gln | Pro | His | Val | Pro | His | Ala | Ile | Thr | Val | Ser | Val | Ala | Asn |
| 485 | | | | | | 490 | | | | | | 495 | | | |
| Glu | Lys | Ala | Leu | Ala | Lys | Cys | Glu | Lys | Tyr | Met | Leu | Thr | His | Gln | Glu |
| 500 | | | | | | 505 | | | | | | 510 | | | |
| Leu | Ala | Ser | Asp | Gly | Glu | Ile | Glu | Thr | Lys | Leu | Ile | Lys | Gly | Asp | Ile |
| 515 | | | | | | 520 | | | | | | 525 | | | |
| Tyr | Lys | Thr | Arg | Gly | Gly | Gly | Gly | Gly | Ser | Val | Gln | Phe | Thr | Asp | Ile |
| 530 | | | | | | 535 | | | | | | 540 | | | |
| Thr | Leu | Lys | Gln | Glu | Ser | Pro | Asn | Gly | Ser | Arg | Lys | Arg | Arg | Ser | Ser |
| 545 | | | | | | 550 | | | | | | 555 | | | 560 |
| Thr | Val | Ala | Pro | Ala | Gln | Pro | Asp | Gly | Ala | Glu | Ser | Glu | Trp | Thr | Asp |
| 565 | | | | | | 570 | | | | | | 575 | | | |
| Val | Glu | Thr | Arg | Cys | Ser | Val | Ala | Val | Glu | Met | Arg | Ala | Gly | Ser | Gln |
| 580 | | | | | | 585 | | | | | | 590 | | | |
| Leu | Gly | Pro | Gly | Tyr | Gly | His | Ala | Gln | Pro | Lys | Arg | Lys | Lys | Pro | |
| 595 | | | | | | 600 | | | | | | 605 | | | 608 |

<210> 1152
<211> 111
<212>Amino acid
<213> Homo sapiens

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Pro | Phe | Ser | Ser | Ser | Ser | Val | Ser | Ser | Lys | Gly | Ser | Asp | Pro | Phe | Gly |
| 1 | | | | | | 5 | | | 10 | | | 15 | | | |
| Thr | Leu | Asp | Pro | Phe | Gly | Ser | Gly | Ser | Phe | Asn | Ser | Ala | Glu | Gly | Phe |
| | | | | | | 20 | | | 25 | | | 30 | | | |
| Ala | Asp | Phe | Ser | Gln | Met | Ser | Lys | Gly | Lys | Ser | Thr | Pro | Val | Ser | Gln |
| | | | | | | 35 | | | 40 | | | 45 | | | |
| Leu | Gly | Ser | Ala | Asp | Phe | Pro | Glu | Ala | Pro | Asp | Pro | Phe | Gln | Pro | Leu |
| | | | | | | 50 | | | 55 | | | 60 | | | |
| Gly | Ala | Asp | Ser | Gly | Asp | Pro | Phe | Gln | Ser | Lys | Lys | Gly | Phe | Gly | Asp |
| | | | | | | 65 | | | 70 | | | 75 | | | 80 |
| Pro | Phe | Ser | Gly | Lys | Asp | Pro | Phe | Val | Pro | Ser | Ser | Ala | Lys | Pro | |
| | | | | | | 85 | | | 90 | | | 95 | | | |
| Ser | Lys | Ala | Ser | Ala | Ser | Gly | Phe | Ala | Asp | Phe | Thr | Ser | Val | Ser | |
| | | | | | | 100 | | | 105 | | | 110 | | | 111 |

<210> 1153

<211> 444
<212> Amino acid
<213> Homo sapiens

<400> 1153
Met Ser Ieu Met Val Val Ser Met Ala Cys Val Gly Leu Phe Leu Val
1 5 10 15
Gln Arg Ala Gly Pro His Met Gly Gly Gln Asp Lys Pro Phe Leu Ser
20 25 30
Ala Trp Pro Ser Ala Val Val Pro Arg Gly Gly His Val Thr Leu Arg
35 40 45
Cys His Tyr Arg His Arg Phe Asn Asn Phe Met Leu Tyr Lys Glu Asp
50 55 60
Arg Ile His Ile Pro Ile Phe His Gly Arg Ile Phe Gln Glu Ser Phe
65 70 75 80
Asn Met Ser Pro Val Thr Thr Ala His Ala Gly Asn Tyr Thr Cys Arg
85 90 95
Gly Ser His Pro His Ser Pro Thr Gly Trp Ser Ala Pro Ser Asn Pro
100 105 110
Val Val Ile Met Val Thr Gly Asn His Arg Lys Pro Ser Leu Leu Ala
115 120 125
His Pro Gly Pro Leu Val Lys Ser Gly Glu Arg Val Ile Leu Gln Cys
130 135 140
Trp Ser Asp Ile Met Phe Glu His Phe Leu His Lys Glu Gly Ile
145 150 155 160
Ser Lys Asp Pro Ser Arg Leu Val Gly Gln Ile His Asp Gly Val Ser
165 170 175
Lys Ala Asn Phe Ser Ile Gly Pro Met Met Gln Asp Leu Ala Gly Thr
180 185 190
Tyr Arg Cys Tyr Gly Ser Val Thr His Ser Pro Tyr Gln Leu Ser Ala
195 200 205
Pro Ser Asp Pro Leu Asp Ile Val Ile Thr Gly Leu Tyr Glu Lys Pro
210 215 220
Ser Leu Ser Ala Gln Pro Gly Pro Thr Val Leu Ala Gly Glu Ser Val
225 230 235 240
Thr Leu Ser Cys Ser Ser Arg Ser Tyr Asp Met Tyr His Leu Ser
245 250 255
Arg Glu Gly Glu Ala His Glu Arg Arg Phe Ser Ala Gly Pro Lys Val
260 265 270
Asn Gly Thr Phe Gln Ala Asp Phe Pro Leu Gly Pro Ala Thr His Gly
275 280 285
Gly Thr Tyr Arg Cys Phe Gly Ser Phe Arg Asp Ser Pro Tyr Glu Trp
290 295 300
Ser Asn Ser Ser Asp Pro Leu Leu Val Ser Val Thr Gly Asn Pro Ser
305 310 315 320
Asn Ser Trp Pro Ser Pro Thr Glu Pro Ser Ser Glu Thr Gly Asn Pro
325 330 335
Arg His Leu His Val Leu Ile Gly Thr Ser Val Val Ile Ile Leu Phe
340 345 350
Ile Leu Leu Leu Phe Phe Leu Leu His Arg Trp Cys Ser Asn Lys Lys
355 360 365
Asn Ala Ala Val Met Asp Gln Glu Ser Ala Gly Asn Arg Thr Ala Asn
370 375 380
Ser Glu Asp Ser Asp Glu Gln Asp Pro Gln Glu Val Thr Tyr Thr Gln
385 390 395 400
Leu Asn His Cys Val Phe Thr Gln Arg Lys Ile Thr Arg Pro Ser Gln
405 410 415
Arg Pro Lys Thr Pro Pro Thr Asp Ile Ile Val Tyr Thr Glu Leu Pro
420 425 430
Asn Ala Glu Ser Arg Ser Lys Val Val Ser Cys Pro

435

440

444

<210> 1154
<211> 522
<212>Amino acid
<213> Homo sapiens

<400> 1154
Met Ser Leu Arg Val His Thr Leu Pro Thr Leu Leu Gly Ala Val Val
1 5 10 15
Arg Pro Gly Cys Arg Glu Leu Leu Cys Leu Leu Met Ile Thr Val Thr
20 25 30
Val Gly Pro Gly Ala Ser Gly Val Cys Pro Thr Ala Cys Ile Cys Ala
35 40 45
Thr Asp Ile Val Ser Cys Thr Asn Lys Asn Leu Ser Lys Val Pro Gly
50 55 60
Asn Leu Phe Arg Leu Ile Lys Arg Leu Asp Leu Ser Tyr Asn Arg Ile
65 70 75 80
Gly Leu Leu Asp Ser Glu Trp Ile Pro Val Ser Phe Ala Lys Leu Asn
85 90 95
Thr Leu Ile Leu Arg His Asn Asn Ile Thr Ser Ile Ser Thr Gly Ser
100 105 110
Phe Ser Thr Thr Pro Asn Leu Lys Cys Leu Asp Leu Ser Ser Asn Lys
115 120 125
Leu Lys Thr Val Lys Asn Ala Val Phe Gln Glu Leu Lys Val Leu Glu
130 135 140
Val Leu Leu Leu Tyr Asn Asn His Ile Ser Tyr Leu Asp Pro Ser Ala
145 150 155 160
Phe Gly Gly Leu Ser Gln Leu Gln Lys Leu Tyr Leu Ser Gly Asn Phe
165 170 175
Leu Thr Gln Phe Pro Met Asp Leu Tyr Val Gly Arg Phe Lys Leu Ala
180 185 190
Glu Leu Met Phe Leu Asp Val Ser Tyr Asn Arg Ile Pro Ser Met Pro
195 200 205
Met His His Ile Asn Leu Val Pro Gly Lys Gln Leu Arg Gly Ile Tyr
210 215 220
Leu His Gly Asn Pro Phe Val Cys Asp Cys Ser Leu Val Ser Leu Leu
225 230 235 240
Val Phe Trp Tyr Arg Arg His Phe Ser Ser Val Met Asp Phe Lys Asn
245 250 255
Asp Tyr Thr Cys Arg Leu Trp Ser Asp Ser Arg His Ser Arg Gln Val
260 265 270
Leu Leu Leu Gln Asp Ser Phe Met Asn Cys Ser Asp Ser Ile Ile Asn
275 280 285
Gly Ser Phe Arg Ala Leu Gly Phe Ile His Glu Ala Gln Val Gly Glu
290 295 300
Arg Leu Met Val His Cys Asp Ser Lys Thr Gly Asn Ala Asn Thr Asp
305 310 315 320
Phe Ile Trp Val Gly Pro Asp Asn Arg Leu Leu Glu Pro Asp Lys Glu
325 330 335
Met Glu Asn Phe Tyr Val Phe His Asn Gly Ser Leu Val Ile Glu Ser
340 345 350
Pro Arg Phe Glu Asp Ala Gly Val Tyr Ser Cys Ile Ala Met Asn Lys
355 360 365
Gln Arg Leu Leu Asn Glu Thr Val Asp Val Thr Ile Asn Val Ser Asn
370 375 380
Phe Thr Val Ser Arg Ser His Ala His Glu Ala Phe Asn Thr Ala Phe
385 390 395 400
Thr Thr Leu Ala Ala Cys Val Ala Ser Ile Val Leu Val Leu Tyr

| | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Tyr | Leu | Thr | Pro | Cys | Pro | Cys | Lys | Cys | Lys | Thr | Lys | Arg | Gln | Gln | Lys |
| 405 | | | | | | | | 410 | | | | | 415 | | | |
| | | | | 420 | | | | 425 | | | | | 430 | | | |
| Asn | Met | Leu | His | Gln | Ser | Asn | Ala | His | Ser | Ser | Ile | Leu | Ser | Pro | Gly | |
| | | | | 435 | | | | 440 | | | | | 445 | | | |
| Pro | Ala | Ser | Asp | Ala | Ser | Ala | Asp | Glu | Arg | Lys | Ala | Gly | Ala | Gly | Lys | |
| | | | | 450 | | | | 455 | | | | | 460 | | | |
| Arg | Val | Val | Phe | Leu | Glu | Pro | Leu | Lys | Asp | Thr | Ala | Ala | Gly | Gln | Asn | |
| | | | | 465 | | | | 470 | | | | | 475 | | | 480 |
| Gly | Lys | Val | Arg | Leu | Phe | Pro | Ser | Glu | Ala | Val | Ile | Ala | Glu | Gly | Ile | |
| | | | | 485 | | | | 490 | | | | | 495 | | | |
| Leu | Lys | Ser | Thr | Arg | Gly | Lys | Ser | Asp | Ser | Asp | Ser | Val | Asn | Ser | Val | |
| | | | | 500 | | | | 505 | | | | | 510 | | | |
| Phe | Ser | Asp | Thr | Pro | Phe | Val | Ala | Ser | Thr | | | | | | | |
| | | | | 515 | | | | 520 | | | | | 522 | | | |

<210> 1155
<211> 642
<212>Amino acid
<213> Homo sapiens

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ala | Ser | Asp | Phe | Ile | Arg | Ser | Leu | Asp | His | Cys | Gly | Tyr | Ile | Ser | Leu |
| 1 | | | | 5 | | | | | 10 | | | | 15 | | |
| Glu | Gly | Val | Phe | Ser | His | Lys | Phe | Asp | Phe | Glu | Leu | Gln | Asp | Val | Ser |
| | | | | | 20 | | | | 25 | | | | 30 | | |
| Ser | Val | Asn | Glu | Asp | Val | Leu | Leu | Thr | Thr | Gly | Leu | Leu | Cys | Tyr | |
| | | | | | 35 | | | | 40 | | | | 45 | | |
| Thr | Ala | Gln | Arg | Phe | Lys | Pro | Lys | Tyr | Lys | Phe | Phe | His | Lys | Ser | Phe |
| | | | | | 50 | | | | 55 | | | 60 | | | |
| Gln | Glu | Tyr | Thr | Ala | Gly | Arg | Arg | Leu | Ser | Ser | Leu | Leu | Thr | Ser | His |
| | | | | | 65 | | | | 70 | | | 75 | | | 80 |
| Glu | Pro | Glu | Glu | Val | Thr | Lys | Gly | Asn | Gly | Tyr | Leu | Gln | Lys | Met | Val |
| | | | | | 85 | | | | 90 | | | 95 | | | |
| Ser | Ile | Ser | Asp | Ile | Thr | Ser | Thr | Tyr | Ser | Ser | Leu | Leu | Arg | Tyr | Thr |
| | | | | | 100 | | | | 105 | | | | 110 | | |
| Cys | Gly | Ser | Ser | Val | Glu | Ala | Thr | Arg | Ala | Val | Met | Lys | His | Leu | Ala |
| | | | | | 115 | | | | 120 | | | 125 | | | |
| Ala | Val | Tyr | Gln | His | Gly | Cys | Leu | Leu | Gly | Leu | Ser | Ile | Ala | Lys | Arg |
| | | | | | 130 | | | | 135 | | | 140 | | | |
| Pro | Leu | Trp | Arg | Gln | Glu | Ser | Leu | Gln | Ser | Val | Lys | Asn | Thr | Thr | Glu |
| | | | | | 145 | | | | 150 | | | 155 | | | 160 |
| Gln | Glu | Ile | Leu | Lys | Ala | Ile | Asn | Ile | Asn | Ser | Phe | Val | Glu | Cys | Gly |
| | | | | | 165 | | | | 170 | | | 175 | | | |
| Ile | His | Leu | Tyr | Gln | Glu | Ser | Thr | Ser | Lys | Ser | Ala | Leu | Ser | Gln | Glu |
| | | | | | 180 | | | | 185 | | | 190 | | | |
| Phe | Glu | Ala | Phe | Phe | Gln | Gly | Lys | Ser | Leu | Tyr | Ile | Asn | Ser | Gly | Asn |
| | | | | | 195 | | | | 200 | | | 205 | | | |
| Ile | Pro | Asp | Tyr | Leu | Phe | Asp | Phe | Phe | Glu | His | Leu | Pro | Asn | Cys | Ala |
| | | | | | 210 | | | | 215 | | | 220 | | | |
| Ser | Ala | Leu | Asp | Phe | Ile | Lys | Leu | Gly | Phe | Tyr | Gly | Gly | Ala | Met | Ala |
| | | | | | 225 | | | | 230 | | | 235 | | | 240 |
| Ser | Trp | Glu | Lys | Ala | Ala | Glu | Asp | Thr | Gly | Gly | Ile | His | Met | Glu | Glu |
| | | | | | 245 | | | | 250 | | | 255 | | | |
| Ala | Pro | Glu | Thr | Tyr | Ile | Pro | Ser | Arg | Ala | Val | Ser | Leu | Phe | Phe | Asn |
| | | | | | 260 | | | | 265 | | | 270 | | | |
| Trp | Lys | Gln | Glu | Phe | Arg | Thr | Leu | Glu | Val | Thr | Leu | Arg | Asp | Phe | Ser |
| | | | | | 275 | | | | 280 | | | 285 | | | |
| Lys | Leu | Asn | Lys | Gln | Asp | Ile | Arg | Tyr | Leu | Gly | Lys | Ile | Phe | Ser | Ser |

| | | |
|---|-----|-----|
| 290 | 295 | 300 |
| Ala Thr Ser Leu Arg Leu Gln Ile Lys Arg Cys Ala Gly Val Ala Gly | | |
| 305 | 310 | 315 |
| Ser Leu Ser Leu Val Leu Ser Thr Cys Lys Asn Ile Tyr Ser Leu Met | | 320 |
| 325 | 330 | 335 |
| Val Glu Ala Ser Pro Leu Thr Ile Glu Asp Glu Arg His Ile Thr Ser | | |
| 340 | 345 | 350 |
| Val Thr Asn Leu Lys Thr Leu Ser Ile His Asp Leu Gln Asn Gln Arg | | |
| 355 | 360 | 365 |
| Leu Pro Gly Gly Leu Thr Asp Ser Leu Gly Asn Leu Lys Asn Leu Thr | | |
| 370 | 375 | 380 |
| Lys Leu Ile Met Asp Asn Ile Lys Met Asn Glu Glu Asp Ala Ile Lys | | |
| 385 | 390 | 395 |
| Leu Ala Glu Gly Leu Lys Asn Leu Lys Lys Met Cys Leu Phe His Leu | | |
| 405 | 410 | 415 |
| Thr His Leu Ser Asp Ile Gly Glu Gly Met Asp Tyr Ile Val Lys Ser | | |
| 420 | 425 | 430 |
| Leu Ser Ser Glu Pro Cys Asp Leu Glu Glu Ile Gln Leu Val Ser Cys | | |
| 435 | 440 | 445 |
| Cys Leu Ser Ala Asn Ala Val Lys Ile Leu Ala Gln Asn Leu His Asn | | |
| 450 | 455 | 460 |
| Leu Val Lys Leu Ser Ile Leu Asp Leu Ser Glu Asn Tyr Leu Glu Lys | | |
| 465 | 470 | 475 |
| Asp Gly Asn Glu Ala Leu His Glu Leu Ile Asp Arg Met Asn Val Leu | | |
| 485 | 490 | 495 |
| Glu Gln Leu Thr Ala Leu Met Leu Pro Trp Gly Cys Asp Val Gln Gly | | |
| 500 | 505 | 510 |
| Ser Leu Ser Ser Leu Leu Lys His Leu Glu Glu Val Pro Gln Leu Val | | |
| 515 | 520 | 525 |
| Lys Leu Gly Leu Lys Asn Trp Arg Leu Thr Asp Thr Glu Ile Arg Ile | | |
| 530 | 535 | 540 |
| Leu Gly Ala Phe Phe Gly Lys Asn Pro Leu Lys Asn Phe Gln Gln Leu | | |
| 545 | 550 | 555 |
| Asn Leu Ala Gly Asn Arg Val Ser Ser Asp Gly Trp Leu Ala Phe Met | | |
| 565 | 570 | 575 |
| Gly Val Phe Glu Asn Leu Lys Gln Leu Val Phe Phe Asp Phe Ser Thr | | |
| 580 | 585 | 590 |
| Lys Glu Phe Leu Pro Asp Pro Ala Leu Val Arg Lys Leu Ser Gln Val | | |
| 595 | 600 | 605 |
| Leu Ser Lys Leu Thr Phe Leu Gln Glu Ala Arg Leu Val Gly Trp Gln | | |
| 610 | 615 | 620 |
| Phe Asp Asp Asp Asp Leu Ser Val Ile Thr Gly Ala Phe Lys Leu Val | | |
| 625 | 630 | 635 |
| Thr Ala | | 640 |
| 642 | | |

<210> 1156
 <211> 125
 <212>Amino acid
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(125)
 <223> X = any amino acid or stop code

| | | |
|---|---|----|
| <400> 1156 | | |
| Ala Ser Asp Arg Lys Val Ala Met Thr Cys Asp Cys Phe Trp Phe Arg | | |
| 1 | 5 | 10 |
| | | 15 |

Thr Met Leu Asp Gln His Ala Ser Cys Met Glu Val Gly Thr Glu Arg
 20 25 30
 Glu Arg Gln Ala Gly Gly Leu Val Met Phe Asp Pro Ser Gly Phe Pro
 35 40 45
 Thr Gly Glu Lys Val Leu Gln Asp Asp Glu Phe Thr Cys Asp Leu Phe
 50 55 60
 Arg Phe Leu Gln Leu Leu Cys Glu Gly His Asn Ser Gly Leu Xaa Val
 65 70 75 80
 Pro Gly Thr Ser Asp Asp Thr Lys Ala Xaa Ile Met Phe Ser Ser Gln
 85 90 95
 Xaa Xaa Gln Glu Pro Val Ser Ser Asn Tyr Ala Ser Phe Xaa Arg Gln
 100 105 110
 Gln Ile Ile Leu Glu His Gly Ser Ala Leu Gly Ser Gly
 115 120 125

<210> 1157
 <211> 91
 <212>Amino acid
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(91)
 <223> X = any amino acid or stop code

<400> 1157
 Glu Ile Thr His Ile Val Gly Glu Thr Ala Ala Phe Leu Cys Pro Arg
 1 5 10 15
 Leu Arg Leu Arg Arg Gly Gly Lys Asp Gly Ser Pro Lys Pro Gly Phe
 20 25 30
 Leu Ala Ser Val Ile Pro Val Asp Arg Arg Pro Gly Glu Xaa Asp Ile
 35 40 45
 Thr His Ile Val Gly Glu Thr Ala Ala Phe Leu Cys Pro Arg Leu Arg
 50 55 60
 Leu Arg Arg Gly Gly Lys Asp Gly Ser Pro Lys Pro Gly Phe Leu Ala
 65 70 75 80
 Ser Val Ile Pro Val Asp Arg Arg Pro Gly Glu
 85 90 91

<210> 1158
 <211> 254
 <212>Amino acid
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(254)
 <223> X = any amino acid or stop code

<400> 1158
 Ser Lys Phe Ile Phe Tyr Val Asp Ser Gln Ser Met Ile Phe Phe Phe
 1 5 10 15
 Gln Thr Pro Thr Arg His Lys Val Leu Ile Met Glu Phe Cys Pro Cys
 20 25 30

Gly Ser Ieu Tyr Thr Val Leu Glu Glu Pro Ser Asn Ala Tyr Gly Leu
 35 40 45
 Pro Glu Ser Glu Phe Leu Ile Val Leu Arg Asp Val Val Gly Gly Met
 50 55 60
 Asn His Leu Arg Glu Asn Gly Ile Val His Arg Asp Ile Lys Pro Gly
 65 70 75 80
 Asn Ile Met Arg Val Ile Gly Glu Asp Gly Gln Ser Val Tyr Lys Leu
 85 90 95
 Thr Asp Phe Gly Ala Ala Arg Glu Leu Glu Asp Asp Glu Gln Phe Val
 100 105 110
 Ser Leu Tyr Gly Thr Glu Glu Tyr Leu His Pro Asp Met Tyr Glu Arg
 115 120 125
 Ala Val Leu Arg Lys Asp His Gln Lys Lys Tyr Gly Ala Thr Val Asp
 130 135 140
 Leu Trp Ser Ile Gly Val Thr Phe Tyr Gln Gly Lys Pro Thr Gly Ser
 145 150 155 160
 Leu Ala Ile Xaa His Pro Phe Gly Ala Ser Val Arg Asn Lys Ala
 165 170 175
 Ser Asp Gly Ile Lys Ile Ile Thr Gly Lys Gly Leu Leu Gly Ala Ile
 180 185 190
 Ser Gly Val Gln Lys Ser Lys Asn Gly Pro Ile Asp Trp Glu Trp
 195 200 205
 Glu Asp Met Pro Val Ser Cys Ser Pro Ser Gly Val Leu Arg Val
 210 215 220
 Pro Asn Leu Pro Pro Val Leu Ala Asn Ile Leu Glu Ser Arg Ser Arg
 225 230 235 240
 Lys Lys Cys Trp Gly Phe Xaa Pro Ser Phe Leu Gln Glu Asn
 245 250 254

<210> 1159
<211> 162
<212>Amino acid
<213> Homo sapiens

<400> 1159
 Gly Ser Thr Ile Ser Cys Glu Arg Ser Leu Arg Ser Leu Trp Thr Ala
 1 5 10 15
 His Trp Ala Leu Pro Glu Met Asp Ser Arg Ile Pro Tyr Asp Asp Tyr
 20 25 30
 Pro Val Val Phe Leu Pro Ala Tyr Glu Asn Pro Pro Ala Trp Ile Pro
 35 40 45
 Pro His Glu Arg Val His His Pro Asp Tyr Asn Asn Glu Leu Thr Gln
 50 55 60
 Phe Leu Pro Arg Thr Ile Thr Leu Lys Lys Pro Pro Gly Ala Gln Leu
 65 70 75 80
 Gly Phe Asn Ile Arg Gly Gly Lys Ala Ser Gln Leu Gly Ile Phe Ile
 85 90 95
 Ser Lys Val Ile Pro Asp Ser Asp Ala His Arg Ala Gly Leu Gln Glu
 100 105 110
 Gly Asp Gln Val Leu Ala Val Asn Asp Val Asp Phe Gln Asp Ile Glu
 115 120 125
 His Ser Lys Ala Val Glu Ile Leu Lys Thr Ala Arg Glu Ile Ser Met
 130 135 140
 Arg Val Arg Phe Phe Pro Tyr Asn Tyr His Arg Gln Lys Glu Arg Thr
 145 150 155 160
 Val His
 162

<210> 1160
<211> 295
<212>Amino acid
<213> Homo sapiens

<400> 1160
His Glu Gln Val Ser Ala Leu His Arg Arg Ile Lys Ala Ile Val Glu
1 5 10 15
Val Ala Ala Met Cys Gly Val Asn Ile Ile Cys Phe Gln Glu Ala Trp
20 25 30
Thr Met Pro Phe Ala Phe Cys Thr Arg Glu Lys Leu Pro Trp Thr Glu
35 40 45
Phe Ala Glu Ser Ala Glu Asp Gly Pro Thr Thr Arg Phe Cys Gln Lys
50 55 60
Leu Ala Lys Asn His Asp Met Val Val Val Ser Pro Ile Leu Glu Arg
65 70 75 80
Asp Ser Glu His Gly Asp Val Leu Trp Asn Thr Ala Val Val Ile Ser
85 90 95
Asn Ser Gly Ala Val Leu Gly Lys Thr Arg Lys Asn His Ile Pro Arg
100 105 110
Val Gly Asp Phe Asn Glu Ser Thr Tyr Met Glu Gly Asn Leu Gly
115 120 125
His Pro Val Phe Gln Thr Gln Phe Gly Arg Ile Ala Val Asn Ile Cys
130 135 140
Tyr Gly Arg His His Pro Leu Asn Trp Leu Met Tyr Ser Ile Asn Gly
145 150 155 160
Ala Glu Ile Ile Phe Asn Pro Ser Ala Thr Ile Gly Ala Leu Ser Glu
165 170 175
Ser Leu Trp Pro Ile Glu Ala Arg Asn Ala Ala Ile Ala Asn His Cys
180 185 190
Phe Thr Cys Ala Ile Asn Arg Val Gly Thr Glu His Phe Pro Asn Glu
195 200 205
Phe Thr Ser Gly Asp Gly Lys Ala His Gln Asp Phe Gly Tyr Phe
210 215 220
Tyr Gly Ser Ser Tyr Val Ala Ala Pro Asp Ser Ser Arg Thr Pro Gly
225 230 235 240
Leu Ser Arg Ser Arg Asp Gly Leu Leu Val Ala Lys Leu Asp Leu Asn
245 250 255
Leu Cys Gln Gln Val Asn Asp Val Trp Asn Phe Lys Met Thr Gly Arg
260 265 270
Tyr Glu Met Tyr Ala Arg Glu Leu Ala Glu Ala Val Lys Ser Asn Tyr
275 280 285
Ser Pro Thr Ile Val Lys Glu
290 295

<210> 1161
<211> 1621
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1621)
<223> X = any amino acid or stop code

<400> 1161

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Ala | Lys | Ser | Gly | Gly | Cys | Gly | Ala | Gly | Ala | Gly | Val | Gly | Gly | Gly |
| 1 | | | | 5 | | | | 10 | | | | | 15 | | |
| Asn | Gly | Ala | Leu | Thr | Trp | Val | Asn | Asn | Ala | Ala | Lys | Lys | Glu | Glu | Ser |
| | | | | 20 | | | | 25 | | | | | 30 | | |
| Glu | Thr | Ala | Asn | Lys | Asn | Asp | Ser | Ser | Lys | Lys | Leu | Ser | Val | Glu | Arg |
| | | | | 35 | | | | 40 | | | | | 45 | | |
| Val | Tyr | Gln | Lys | Lys | Thr | Gln | Leu | Glu | His | Ile | Leu | Leu | Arg | Pro | Asp |
| | | | | | 50 | | | 55 | | | | 60 | | | |
| Thr | Tyr | Ile | Gly | Ser | Val | Glu | Pro | Leu | Thr | Gln | Phe | Met | Trp | Val | Tyr |
| | | | | | 65 | | | 70 | | | 75 | | 80 | | |
| Asp | Glu | Asp | Val | Gly | Met | Asn | Cys | Arg | Glu | Val | Thr | Phe | Val | Pro | Gly |
| | | | | | 85 | | | | 90 | | | | 95 | | |
| Leu | Tyr | Lys | Ile | Phe | Asp | Glu | Ile | Leu | Val | Asn | Ala | Ala | Asp | Asn | Lys |
| | | | | | 100 | | | 105 | | | | | 110 | | |
| Gln | Arg | Asp | Lys | Asn | Met | Thr | Cys | Ile | Lys | Val | Ser | Ile | Asp | Pro | Glu |
| | | | | | 115 | | | 120 | | | | 125 | | | |
| Ser | Asn | Ile | Ile | Ser | Ile | Trp | Asn | Asn | Gly | Lys | Gly | Ile | Pro | Val | Val |
| | | | | | 130 | | | 135 | | | 140 | | | | |
| Glu | His | Lys | Val | Glu | Lys | Val | Tyr | Val | Pro | Ala | Leu | Ile | Phe | Gly | Gln |
| | | | | | 145 | | | 150 | | | 155 | | | | 160 |
| Leu | Leu | Thr | Ser | Ser | Asn | Tyr | Asp | Asp | Asp | Glu | Lys | Lys | Val | Thr | Gly |
| | | | | | 165 | | | 170 | | | | | 175 | | |
| Gly | Arg | Asn | Gly | Tyr | Gly | Ala | Lys | Leu | Cys | Asn | Ile | Phe | Ser | Thr | Lys |
| | | | | | 180 | | | 185 | | | | | 190 | | |
| Phe | Thr | Val | Glu | Thr | Ala | Cys | Lys | Glu | Tyr | Lys | His | Ser | Phe | Lys | Gln |
| | | | | | 195 | | | 200 | | | | 205 | | | |
| Thr | Trp | Met | Asn | Asn | Met | Met | Lys | Thr | Ser | Glu | Ala | Lys | Ile | Lys | His |
| | | | | | 210 | | | 215 | | | 220 | | | | |
| Phe | Asp | Gly | Glu | Asp | Tyr | Thr | Cys | Ile | Thr | Phe | Gln | Pro | Asp | Leu | Ser |
| | | | | | 225 | | | 230 | | | 235 | | | 240 | |
| Lys | Phe | Lys | Met | Glu | Lys | Leu | Asp | Lys | Asp | Ile | Val | Ala | Leu | Met | Thr |
| | | | | | 245 | | | 250 | | | 255 | | | | |
| Arg | Arg | Ala | Tyr | Asp | Leu | Ala | Gly | Ser | Cys | Arg | Gly | Val | Lys | Val | Met |
| | | | | | 260 | | | 265 | | | 270 | | | | |
| Phe | Asn | Gly | Lys | Lys | Leu | Pro | Val | Asn | Gly | Phe | Arg | Ser | Tyr | Val | Asp |
| | | | | | 275 | | | 280 | | | 285 | | | | |
| Leu | Tyr | Val | Lys | Asp | Lys | Leu | Asp | Glu | Thr | Gly | Val | Ala | Leu | Lys | Val |
| | | | | | 290 | | | 295 | | | 300 | | | | |
| Ile | His | Glu | Leu | Ala | Asn | Glu | Arg | Trp | Asp | Val | Cys | Leu | Thr | Leu | Ser |
| | | | | | 305 | | | 310 | | | 315 | | | 320 | |
| Glu | Lys | Gly | Phe | Gln | Gln | Ile | Ser | Pho | Val | Asn | Ser | Ile | Ala | Thr | Thr |
| | | | | | 325 | | | 330 | | | 335 | | | | |
| Lys | Gly | Gly | Arg | His | Val | Asp | Tyr | Val | Val | Asp | Gln | Val | Val | Gly | Lys |
| | | | | | 340 | | | 345 | | | 350 | | | | |
| Leu | Ile | Glu | Val | Val | Lys | Lys | Lys | Asn | Lys | Ala | Gly | Val | Ser | Val | Lys |
| | | | | | 355 | | | 360 | | | 365 | | | | |
| Pro | Phe | Gln | Val | Lys | Asn | His | Ile | Trp | Val | Phe | Ile | Asn | Cys | Leu | Ile |
| | | | | | 370 | | | 375 | | | 380 | | | | |
| Glu | Asn | Pro | Thr | Phe | Asp | Ser | Gln | Thr | Lys | Glu | Asn | Met | Thr | Leu | Gln |
| | | | | | 385 | | | 390 | | | 395 | | | 400 | |
| Pro | Lys | Ser | Phe | Gly | Ser | Lys | Cys | Gln | Leu | Ser | Glu | Lys | Phe | Phe | Lys |
| | | | | | 405 | | | 410 | | | 415 | | | | |
| Ala | Ala | Ser | Asn | Cys | Gly | Ile | Val | Glu | Ser | Ile | Leu | Asn | Trp | Val | Lys |
| | | | | | 420 | | | 425 | | | 430 | | | | |
| Phe | Lys | Ala | Gln | Thr | Gln | Leu | Asn | Lys | Lys | Cys | Ser | Ser | Val | Lys | Tyr |
| | | | | | 435 | | | 440 | | | 445 | | | | |
| Ser | Lys | Ile | Lys | Gly | Ile | Pro | Lys | Leu | Asp | Asp | Ala | Asn | Asp | Ala | Gly |
| | | | | | 450 | | | 455 | | | 460 | | | | |
| Gly | Lys | His | Ser | Leu | Glu | Cys | Thr | Leu | Ile | Leu | Thr | Glu | Gly | Asp | Ser |
| | | | | | 465 | | | 470 | | | 475 | | | 480 | |
| Ala | Lys | Ser | Leu | Ala | Val | Ser | Gly | Val | Ile | Gly | Arg | Asp | Arg | | |
| | | | | | 485 | | | 490 | | | 495 | | | | |
| Tyr | Gly | Val | Phe | Pro | Leu | Arg | Gly | Lys | Ile | Leu | Asn | Val | Arg | Glu | Ala |

| | | | |
|---|-----|------|------|
| Ser His Lys Gln Ile Met Glu Asn Ala Glu Ile Asn Asn Ile Ile Lys | 500 | 505 | 510 |
| 515 | 520 | 525 | |
| Ile Val Gly Leu Gln Tyr Lys Lys Ser Tyr Asp Asp Ala Gln Ser Leu | 530 | 535 | 540 |
| Lys Thr Leu Arg Tyr Gly Lys Ile Met Ile Met Thr Asp Gln Asp Gln | 545 | 550 | 555 |
| Asp Gly Ser His Ile Lys Gly Leu Leu Ile Asn Phe Ile His His Asn | 560 | | |
| 565 | 570 | 575 | |
| Trp Pro Ser Leu Leu Lys His Gly Phe Leu Glu Glu Phe Ile Thr Pro | 580 | 585 | 590 |
| Ile Val Lys Ala Ser Lys Asn Lys Gln Glu Leu Ser Phe Tyr Ser Ile | 595 | 600 | 605 |
| Pro Glu Phe Asp Glu Trp Lys His Ile Glu Asn Gln Lys Ala Trp | 610 | 615 | 620 |
| Lys Ile Lys Tyr Tyr Lys Gly Leu Gly Thr Ser Thr Ala Lys Glu Ala | 625 | 630 | 635 |
| Lys Glu Tyr Phe Ala Asp Met Glu Arg His Arg Ile Leu Phe Arg Tyr | 640 | | |
| 645 | 650 | 655 | |
| Ala Gly Pro Glu Asp Asp Ala Ala Ile Thr Leu Ala Phe Ser Lys Lys | 660 | 665 | 670 |
| Lys Ile Asp Asp Arg Lys Glu Trp Leu Thr Asn Phe Met Glu Asp Arg | 675 | 680 | 685 |
| Arg Gln Arg Arg Leu His Gly Leu Pro Glu Gln Phe Leu Tyr Gly Thr | 690 | 695 | 700 |
| Ala Thr Lys His Leu Thr Tyr Asn Asp Phe Ile Asn Lys Glu Leu Ile | 705 | 710 | 715 |
| Leu Phe Ser Asn Ser Asp Asn Glu Arg Ser Ile Pro Ser Leu Val Asp | 720 | | |
| 725 | 730 | 735 | |
| Gly Phe Lys Pro Gln Arg Lys Val Leu Phe Thr Cys Phe Lys Arg | 740 | 745 | 750 |
| Asn Asp Lys Arg Glu Val Lys Val Ala Gln Leu Ala Gly Ser Val Ala | 755 | 760 | 765 |
| Glu Met Ser Ala Tyr His His Gly Glu Gln Ala Leu Met Met Thr Ile | 770 | 775 | 780 |
| Val Asn Leu Ala Gln Asn Phe Val Gly Ser Asn Asn Ile Asn Leu Leu | 785 | 790 | 795 |
| Gln Pro Ile Gly Gln Phe Gly Thr Arg Leu His Gly Gly Lys Asp Ala | 800 | | |
| 805 | 810 | 815 | |
| Ala Ser Pro Arg Tyr Ile Phe Thr Met Leu Ser Thr Leu Ala Arg Leu | 820 | 825 | 830 |
| Leu Phe Pro Ala Val Asp Asp Asn Leu Leu Lys Phe Leu Tyr Asp Asp | 835 | 840 | 845 |
| Asn Gln Arg Val Glu Pro Glu Trp Tyr Ile Pro Ile Ile Pro Met Val | 850 | 855 | 860 |
| Leu Ile Asn Gly Ala Glu Gly Ile Gly Thr Gly Trp Ala Cys Lys Leu | 865 | 870 | 875 |
| Pro Asn Tyr Asp Ala Arg Glu Ile Val Asn Asn Val Arg Arg Met Leu | 885 | 890 | 895 |
| Asp Gly Leu Asp Pro His Pro Met Leu Pro Asn Tyr Lys Asn Phe Lys | 900 | 905 | 910 |
| Gly Thr Ile Gln Glu Leu Gly Gln Asn Gln Tyr Ala Val Ser Gly Glu | 915 | 920 | 925 |
| Ile Phe Val Val Asp Arg Asn Thr Val Glu Ile Thr Glu Leu Pro Val | 930 | 935 | 940 |
| Arg Thr Trp Thr Gln Val Tyr Lys Glu Gln Val Leu Glu Pro Met Leu | 945 | 950 | 955 |
| Asn Gly Thr Asp Lys Thr Pro Ala Leu Ile Ser Asp Tyr Lys Glu Tyr | 965 | 970 | 975 |
| His Thr Asp Thr Thr Val Lys Phe Val Val Lys Met Thr Glu Glu Lys | 980 | 985 | 990 |
| Leu Ala Gln Ala Glu Ala Ala Gly Leu His Lys Val Phe Lys Leu Gln | 995 | 1000 | 1005 |
| Thr Thr Leu Thr Cys Asn Ser Met Val Leu Phe Asp His Met Gly Cys | | | |

1010 1015 1020
 Leu Lys Lys Tyr Glu Thr Val Gln Asp Ile Leu Lys Glu Phe Phe Asp
 1025 1030 1035 1040
 Leu Arg Leu Ser Tyr Tyr Gly Leu Arg Lys Glu Trp Leu Val Gly Met
 1045 1050 1055
 Leu Gly Ala Glu Phe Thr Lys Leu Asn Asn Gln Ala Arg Phe Ile Leu
 1060 1065 1070
 Glu Lys Ile Gln Gly Lys Ile Thr Ile Kaa Asn Arg Ser Lys Lys Asp
 1075 1080 1085
 Leu Ile Gln Met Leu Val Gln Arg Gly Tyr Glu Ser Asp Pro Val Lys
 1090 1095 1100
 Ala Trp Lys Glu Ala Gln Glu Lys Ala Ala Glu Glu Asp Glu Thr Gln
 1105 1110 1115 1120
 Asn Gln His Asp Asp Ser Ser Asp Ser Gly Thr Pro Ser Gly Pro
 1125 1130 1135
 Asp Phe Asn Tyr Ile Leu Asn Met Ser Leu Trp Ser Leu Thr Lys Glu
 1140 1145 1150
 Lys Val Glu Glu Leu Ile Lys Gln Arg Asp Ala Lys Gly Arg Glu Val
 1155 1160 1165
 Asn Asp Leu Lys Arg Lys Ser Pro Ser Asp Leu Trp Lys Glu Asp Leu
 1170 1175 1180
 Ala Ala Phe Val Glu Glu Leu Asp Lys Val Glu Ser Gln Glu Arg Glu
 1185 1190 1195 1200
 Asp Val Leu Ala Gly Met Ser Gly Lys Ala Ile Lys Gly Lys Val Gly
 1205 1210 1215
 Lys Pro Lys Val Lys Lys Leu Gln Leu Glu Glu Thr Met Pro Ser Pro
 1220 1225 1230
 Tyr Gly Arg Arg Ile Ile Pro Glu Ile Thr Ala Met Lys Ala Asp Ala
 1235 1240 1245
 Ser Lys Lys Leu Leu Lys Lys Lys Gly Asp Leu Asp Thr Ala Ala
 1250 1255 1260
 Val Lys Val Glu Phe Asp Glu Glu Phe Ser Gly Ala Pro Val Glu Gly
 1265 1270 1275 1280
 Ala Gly Glu Glu Ala Leu Thr Pro Ser Val Pro Ile Asn Lys Gly Pro
 1285 1290 1295
 Lys Pro Lys Arg Glu Lys Lys Glu Pro Gly Thr Arg Val Arg Lys Thr
 1300 1305 1310
 Pro Thr Ser Ser Gly Lys Pro Ser Ala Lys Lys Val Lys Lys Arg Asn
 1315 1320 1325
 Pro Trp Ser Asp Asp Glu Ser Lys Ser Glu Ser Asp Leu Glu Glu Thr
 1330 1335 1340
 Glu Pro Val Val Ile Pro Arg Asp Ser Leu Leu Arg Arg Ala Ala Ala
 1345 1350 1355 1360
 Glu Arg Pro Lys Tyr Thr Phe Asp Phe Ser Glu Glu Glu Asp Asp Asp
 1365 1370 1375
 Ala Asp Asp Asp Asp Asp Asn Asn Asp Leu Glu Glu Leu Lys Val
 1380 1385 1390
 Lys Ala Ser Pro Ile Thr Asn Asp Gly Glu Asp Glu Phe Val Pro Ser
 1395 1400 1405
 Asp Gly Leu Asp Lys Asp Glu Tyr Thr Phe Ser Pro Gly Lys Ser Lys
 1410 1415 1420
 Ala Thr Pro Glu Lys Ser Leu His Asp Lys Ser Gln Asp Phe Ser Pro
 1425 1430 1435 1440
 Asn Leu Phe Ser Phe Pro Ser Tyr Ser Gln Lys Ser Glu Asp Asp Ser
 1445 1450 1455
 Ala Lys Phe Asp Ser Asn Glu Glu Asp Ser Ala Ser Val Phe Ser Pro
 1460 1465 1470
 Ser Phe Gly Leu Lys Gln Thr Asp Lys Val Pro Ser Lys Thr Val Ala
 1475 1480 1485
 Ala Lys Lys Gly Lys Pro Ser Ser Asp Thr Val Pro Lys Pro Lys Arg
 1490 1495 1500
 Ala Pro Lys Gln Lys Lys Val Val Glu Ala Val Asn Ser Asp Ser Asp
 1505 1510 1515 1520
 Ser Glu Phe Gly Ile Pro Lys Lys Thr Thr Pro Lys Gly Lys Gly

| | | |
|---|------|------|
| Arg Gly Ala Lys Lys Arg Lys Ala Ser Gly Ser Glu Asn Glu Gly Asp | 1530 | 1535 |
| 1540 | 1545 | 1550 |
| Tyr Asn Pro Gly Arg Lys Thr Ser Lys Thr Thr Ser Lys Lys Pro Lys | | |
| 1555 | 1560 | 1565 |
| Lys Thr Ser Phe Asp Asp Ser Asp Val Asp Ile Phe Pro Ser Asp | | |
| 1570 | 1575 | 1580 |
| Phe Pro Thr Glu Pro Pro Ser Leu Pro Arg Thr Gly Arg Ala Arg Lys | | |
| 1585 | 1590 | 1595 |
| Glu Val Lys Tyr Phe Ala Glu Ser Asp Glu Glu Asp Asp Val Asp | | |
| 1605 | 1610 | 1615 |
| Phe Ala Met Phe Asn | | |
| 16201621 | | |

<210> 1162
<211> 73
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(73)
<223> X = any amino acid or stop code

| | | | |
|---|----|----|----|
| Lys Gly Cys Leu Ala Ala Ser Phe Asn Cys Ile Phe Leu Tyr Thr Gly | | | |
| 1 | 5 | 10 | 15 |
| Glu Leu Tyr Pro Thr Met Ile Arg Xaa Val Glu Ala Xaa Trp Glu Asn | | | |
| 20 | 25 | 30 | |
| Asp Ser Leu Phe Leu Gly Lys Asp Ile Leu Leu Cys Thr Gly Gln Thr | | | |
| 35 | 40 | 45 | |
| Pro Glu Leu Asn Gln Val His Pro Ser Pro Lys Ala Pro Pro Asn Thr | | | |
| 50 | 55 | 60 | |
| His His Cys Lys Ala His Ser Ser His | | | |
| 65 | 70 | 73 | |

<210> 1163
<211> 336
<212>Amino acid
<213> Homo sapiens

| | | | |
|---|----|----|----|
| <400> 1163 | | | |
| Glu Asn Ser Phe Glu Cys Lys Asp Cys Gly Lys Ala Phe Ser Arg Gly | | | |
| 1 | 5 | 10 | 15 |
| Tyr Gln Leu Ser His His Gln Lys Ile His Thr Gly Glu Lys Pro Tyr | | | |
| 20 | 25 | 30 | |
| Glu Cys Lys Glu Cys Lys Lys Ala Phe Arg Trp Gly Asn Gln Leu Thr | | | |
| 35 | 40 | 45 | |
| Gln His Gln Lys Ile His Thr Gly Glu Lys Pro Tyr Glu Cys Lys Asp | | | |
| 50 | 55 | 60 | |
| Cys Gly Lys Ala Phe Arg Trp Gly Ser Ser Leu Val Ile His Lys Arg | | | |
| 65 | 70 | 75 | 80 |
| Ile His Thr Gly Glu Lys Pro Tyr Glu Cys Lys Asp Cys Gly Lys Ala | | | |
| 85 | 90 | 95 | |

Phe Arg Arg Gly Asp Glu Leu Thr Gln His Gln Arg Phe His Thr Gly
 100 105 110
 Glu Lys Asp Tyr Glu Cys Lys Asp Cys Gly Lys Thr Phe Ser Arg Val
 115 120 125
 Tyr Lys Leu Ile Gln His Lys Arg Ile His Ser Gly Glu Lys Pro Tyr
 130 135 140
 Glu Cys Lys Asp Cys Gly Lys Ala Phe Ile Cys Gly Ser Ser Leu Ile
 145 150 155 160
 Gln His Lys Arg Ile His Thr Gly Glu Lys Pro Tyr Glu Cys Gln Glu
 165 170 175
 Cys Gly Lys Ala Phe Thr Arg Val Asn Tyr Leu Thr Gln His Gln Lys
 180 185 190
 Ile His Thr Gly Glu Lys Pro His Glu Cys Lys Glu Cys Gly Lys Ala
 195 200 205
 Phe Arg Trp Gly Ser Ser Leu Val Lys His Glu Arg Ile His Thr Gly
 210 215 220
 Glu Lys Pro Tyr Lys Cys Thr Glu Cys Gly Lys Ala Phe Asn Cys Gly
 225 230 235 240
 Tyr His Leu Thr Gln His Glu Arg Ile His Thr Gly Glu Thr Pro Tyr
 245 250 255
 Lys Cys Lys Glu Cys Gly Lys Ala Phe Ile Tyr Gly Ser Ser Leu Val
 260 265 270
 Lys His Glu Arg Ile His Thr Gly Val Lys Pro Tyr Gly Cys Thr Glu
 275 280 285
 Cys Gly Lys Ser Phe Ser His Gly His Gln Leu Thr Gln His Gln Lys
 290 295 300
 Thr His Ser Gly Ala Lys Ser Tyr Glu Cys Lys Glu Cys Gly Lys Ala
 305 310 315 320
 Cys Asn His Leu Asn His Leu Arg Glu His Gln Arg Ile His Asn Ser
 325 330 335 336

<210> 1164
<211> 118
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(118)
<223> X = any amino acid or stop code

<400> 1164
His Gln Tyr Leu Asp Asp Leu Tyr Pro Leu His Val Met Thr Ile Leu
 1 5 10 15
Leu Lys Ser His Phe Phe Thr Met Leu Lys Arg Pro Val Gly Ser Ser
 20 25 30
Ser Phe Ala Ser Leu Pro Phe Tyr His Gln Ser Ile Leu Leu Arg Lys
 35 40 45
Asn Gln Met Lys Arg Lys Lys Thr Gln Gln Asp Leu Thr His Ile Asn
 50 55 60
Trp Thr Leu Gln Ala Val Ser Ile Gln Thr Cys Ile Trp Leu Gln Lys
 65 70 75 80
Lys Pro Ser Ser Tyr Phe His Gln Leu Pro Asn Gln Val Leu Xaa Pro
 85 90 95
Glu Asn Ser Gly Pro Glu Ser Cys Leu Tyr Asp Leu Ala Ala Val Val
 100 105 110
Val His His Gly Ser Gly

115

118

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<210> 1165
<211> 146
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(146)
<223> X = any amino acid or stop code

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```

<400> 1165
Xaa Leu Asp Pro Asp Thr Leu Pro Ala Val Ala Thr Leu Leu Met Asp
 1           5          10          15
Val Met Phe Tyr Ser Asn Gly Val Lys Asp Pro Met Ala Thr Gly Asp
 20          25          30
Asp Cys Gly His Ile Arg Phe Phe Ser Ser Leu Ile Glu Gly Tyr
 35          40          45
Ile Ser Leu Val Met Asp Val Gln Thr Gln Gln Arg Phe Pro Ser Asn
 50          55          60
Leu Leu Phe Thr Ser Ala Ser Gly Glu Leu Trp Lys Met Val Arg Ile
 65          70          75          80
Gly Gly Gln Pro Leu Gly Phe Gly Pro Val Trp Glu Ser Gly Pro Thr
 85          90          95
Gly Pro Thr Ser Pro Leu Ile Leu Pro Val Thr Pro Ser Ser Ser His
100          105          110
Arg Gln Ala Ala Ser Gln Val Thr Thr Thr Lys Gln Gly Gln Trp Leu
115          120          125
Cys Leu Lys Arg Pro Ser Ala Arg Ser Pro Asp His Thr Ala Cys Leu
130          135          140
Gly *          145

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<210> 1166
<211> 84
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(84)
<223> X = any amino acid or stop code

```

```

<400> 1166
Glu Ala Pro Leu Thr Ser Val Cys Phe Ser Leu Glu Arg Arg Phe Gly
 1           5          10          15
Ser Ser Ser Asn Thr Thr Ser Phe Gly Thr Leu Ala Ser Gln Asn Ala
 20          25          30
Pro Thr Phe Gly Ser Leu Ser Gln Gln Thr Ser Gly Phe Gly Thr Gln
 35          40          45
Ser Ser Gly Phe Ser Gly Phe Gly Ser Gly Thr Gly Gly Phe Ser Phe
 50          55          60
Gly Ser Asn Asn Ser Xaa Val Ser Pro Phe Leu Ser Leu Thr Leu Ile

```

65

70

75

80

Lys Ser Ile Lys
84

<210> 1167
<211> 112
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(112)
<223> X = any amino acid or stop code

<400> 1167
 Glu Glu Pro Gln Gly Ser Pro Ile Trp Val Trp Leu Ala Gly Ser Leu
 1 5 10 15
 Thr Ser Val Ser Cys Phe Leu Pro Phe Gln Arg Met Arg Ile Lys Pro
 20 25 30
 His Gln Gly Gln Tyr Ile Gly Glu Met Ser Phe Leu Gln His His Lys
 35 40 45
 Gly Glu Cys Arg Pro Gln Lys Asp Xaa Ala Arg Gln Glu Asn Pro Cys
 50 55 60
 Gly Pro Cys Ser Glu Arg Arg Lys His Leu Leu Gly Gln Asp Pro Lys
 65 70 75 80
 Thr Cys Lys Cys Ser Cys Lys Asn Thr Asp Ser Arg Cys Lys Ala Arg
 85 90 95
 Pro Leu Glu Leu Asn Glu Arg Thr Cys Arg Cys Asp Lys Pro Arg Arg
 100 105 110 112

<210> 1168
<211> 319
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(319)
<223> X = any amino acid or stop code

<400> 1168
 Thr Leu Trp Ala Gly Pro Gly Leu Cys Pro Gln Ser His Ser Ser Ser
 1 5 10 15
 Ser Val Pro Ala Pro Trp Glu Pro His Val Glu Arg Ala Leu Arg Thr
 20 25 30
 Asp Arg Asn Gln Gly Gln Arg Pro Leu Leu Ser Ala Ser Trp Ala Pro
 35 40 45
 Ala Pro Ala Arg Pro Leu Phe Leu Thr Ser Pro Val Leu Leu Pro Lys
 50 55 60
 Ser Arg Ala Ile Pro Ala Ala Arg Asp Pro Ser Xaa Ala Gly Ile Phe
 65 70 75 80
 Cys Leu Leu Glu Met Ala Gly Gly Gln Ala Ser Val Val Ile Ile Gly

| | | |
|---|-----|-----|
| Ser Ala Gly Val Leu Gly Cys Arg Trp Gly Ser Ser Gly Lys Ser His | 90 | 95 |
| 100 | 105 | 110 |
| Ser Leu Ser Pro Ser Arg Lys Gly Asn Leu His Leu Leu Ser Gln Glu | 115 | 120 |
| | 125 | |
| Pro Gln Thr Thr Val Val His Asn Ala Thr Asp Gly Ile Lys Gly Ser | 130 | 135 |
| | 140 | |
| Thr Glu Ser Cys Asn Thr Thr Glu Asp Glu Asp Leu Lys Val Arg | 145 | 150 |
| | 155 | 160 |
| Lys Gln Glu Ile Ile Lys Ile Thr Glu Gln Leu Ile Glu Ala Ile Asn | 165 | 170 |
| | 175 | |
| Asn Gly Asp Phe Glu Ala Tyr Thr Lys Ile Cys Asp Pro Gly Leu Thr | 180 | 185 |
| | 190 | |
| Ser Phe Glu Pro Glu Ala Leu Gly Asn Leu Val Glu Gly Met Asp Phe | 195 | 200 |
| | 205 | |
| His Lys Phe Tyr Phe Glu Asn Arg Glu Trp Val Arg Ala Ala Asp Ile | 210 | 215 |
| | 220 | |
| Leu Leu Pro Ala Pro Leu Pro Leu Cys Leu Cys Leu Leu Leu Thr Phe | 225 | 230 |
| | 235 | 240 |
| Ser Ser Gln Leu Pro Thr Phe Pro Leu Phe Asp Leu Arg Ala Ala Leu | 245 | 250 |
| | 255 | |
| Leu Leu Cys Met Leu Val Pro Leu Cys Pro Asp Gly Cys Arg Gln Ala | 260 | 265 |
| | 270 | |
| Pro Leu Lys Ala Leu Leu Leu Ser Ser Lys Cys His Ser Phe Cys Ser | 275 | 280 |
| | 285 | |
| Cys Phe Val Ala Val Pro Val Thr Thr Ile Lys Leu Thr Tyr Phe Leu | 290 | 295 |
| | 300 | |
| Pro Gly Ala Val Ala Tyr Ala Cys Asn Pro Asn Thr Leu Gly Gly | 305 | 310 |
| | 315 | 319 |

<210> 1169
 <211> 96
 <212>Amino acid
 <213> Homo sapiens

| | | | |
|---|------------|----|----|
| Glu Arg Ala Gly Ala Gly Gly Ala Ala Ala Cys Arg Ala Gly Thr Arg | <400> 1169 | | |
| 1 | 5 | 10 | 15 |
| Ser Gly Ala Thr Ser Arg Thr Pro Trp Pro Leu His Arg Gln Leu Ser | | | |
| 20 | 25 | 30 | |
| Met Met Leu Met Leu Ala Gln Ser Asn Pro Gln Leu Phe Ala Leu Met | | | |
| 35 | 40 | 45 | |
| Gly Thr Arg Ala Gly Ile Ala Arg Glu Leu Glu Arg Val Glu Gln Gln | | | |
| 50 | 55 | 60 | |
| Ser Arg Leu Glu Gln Leu Ser Ala Ala Glu Leu Gln Ser Arg Asn Gln | | | |
| 65 | 70 | 75 | 80 |
| Gly His Trp Ala Asp Trp Leu Gln Ala Tyr Arg Ala Arg Leu Gly Gln | | | |
| 85 | 90 | 95 | 96 |

<210> 1170
 <211> 145
 <212>Amino acid
 <213> Homo sapiens

 <220>
 <221> misc_feature

<222> (1) . . . (145)
 <223> X = any amino acid or stop code

<400> 1170
 Asn Gly Thr Leu Phe Ile Met Val Met His Ile Lys Asp Leu Val Ser
 1 5 10 15
 Asp Tyr Lys Glu Xaa Trp Leu Xaa Arg Lys Pro Leu Pro Trp Xaa Glu
 20 25 30
 Ala Leu Leu Leu Arg Asp Cys Phe Phe Phe Xaa Val Thr Glu Asn Gly
 35 40 45
 Ala Asp Pro Asn Pro Tyr Val Lys Thr Tyr Leu Leu Pro Asp Asn His
 50 55 60
 Lys Thr Ser Lys Arg Lys Thr Lys Ile Ser Arg Lys Thr Arg Asn Pro
 65 70 75 80
 Thr Phe Asn Glu Met Leu Val Tyr Ser Gly Tyr Ser Lys Glu Thr Leu
 85 90 95
 Arg Gln Arg Glu Leu Gln Leu Ser Val Leu Ser Ala Glu Ser Leu Arg
 100 105 110
 Glu Asn Phe Phe Leu Gly Gly Val Thr Leu Pro Leu Lys Asp Phe Asn
 115 120 125
 Leu Ser Lys Glu Thr Val Lys Trp Tyr Glu Leu Thr Ala Ala Thr Tyr
 130 135 140
 Leu
 145

<210> 1171
 <211> 464
 <212>Amino acid
 <213> Homo sapiens

<400> 1171
 Leu His Arg Ile Met Gln Leu Ala Val Val Val Ser Gln Val Leu Glu
 1 5 10 15
 Asn Gly Ser Ser Val Leu Val Cys Leu Glu Glu Gly Trp Asp Ile Thr
 20 25 30
 Ala Gln Val Thr Ser Leu Val Gln Leu Leu Ser Asp Pro Phe Tyr Arg
 35 40 45
 Thr Leu Glu Gly Phe Gln Met Leu Val Glu Lys Glu Trp Leu Ser Phe
 50 55 60
 Gly His Lys Phe Ser Gln Arg Ser Ser Leu Thr Leu Asn Cys Gln Gly
 65 70 75 80
 Ser Gly Phe Ala Pro Val Phe Leu Gln Phe Leu Asp Cys Val His Gln
 85 90 95
 Val His Asn Gln Tyr Pro Thr Glu Phe Glu Phe Asn Leu Tyr Tyr Leu
 100 105 110
 Lys Phe Leu Ala Phe His Tyr Val Ser Asn Arg Phe Lys Thr Phe Leu
 115 120 125
 Leu Asp Ser Asp Tyr Glu Arg Leu Glu His Gly Thr Leu Phe Asp Asp
 130 135 140
 Lys Gly Glu Lys His Ala Lys Lys Gly Val Cys Ile Trp Glu Cys Ile
 145 150 155 160
 Asp Arg Met His Lys Arg Ser Pro Ile Phe Phe Asn Tyr Leu Tyr Ser
 165 170 175
 Pro Leu Glu Ile Glu Ala Leu Lys Pro Asn Val Asn Val Ser Ser Leu
 180 185 190

| | | | |
|---|-----|-----|-----|
| Lys Lys Trp Asp Tyr Tyr Ile Glu Glu Thr Leu Ser Thr Gly Pro Ser | | | |
| 195 | 200 | 205 | |
| Tyr Asp Trp Met Met Leu Thr Pro Lys His Phe Pro Ser Glu Asp Ser | | | |
| 210 | 215 | 220 | |
| Asp Leu Ala Gly Glu Ala Gly Pro Arg Ser Gln Arg Arg Thr Val Trp | | | |
| 225 | 230 | 235 | 240 |
| Pro Cys Tyr Asp Asp Val Ser Cys Thr Gln Pro Asp Ala Leu Thr Ser | | | |
| 245 | 250 | 255 | |
| Leu Phe Ser Glu Ile Glu Lys Leu Glu His Lys Leu Asn Gln Ala Pro | | | |
| 260 | 265 | 270 | |
| Glu Lys Trp Gln Gln Leu Trp Glu Arg Val Thr Val Asp Leu Lys Glu | | | |
| 275 | 280 | 285 | |
| Glu Pro Arg Thr Asp Arg Ser Gln Arg His Leu Ser Arg Ser Pro Gly | | | |
| 290 | 295 | 300 | |
| Ile Val Ser Thr Asn Leu Pro Ser Tyr Gln Lys Arg Ser Leu Leu His | | | |
| 305 | 310 | 315 | 320 |
| Leu Pro Asp Ser Ser Met Gly Glu Glu Gln Asn Ser Ser Ile Ser Pro | | | |
| 325 | 330 | 335 | |
| Ser Asn Gly Val Glu Arg Arg Ala Ala Thr Leu Tyr Ser Gln Tyr Thr | | | |
| 340 | 345 | 350 | |
| Ser Lys Asn Asp Glu Asn Arg Ser Phe Glu Gly Thr Leu Tyr Lys Arg | | | |
| 355 | 360 | 365 | |
| Gly Ala Leu Leu Lys Gly Trp Lys Pro Arg Trp Phe Val Leu Asp Val | | | |
| 370 | 375 | 380 | |
| Thr Lys His Gln Leu Arg Tyr Tyr Asp Ser Gly Glu Asp Thr Ser Cys | | | |
| 385 | 390 | 395 | 400 |
| Lys Gly His Ile Asp Leu Ala Glu Val Glu Met Val Ile Pro Ala Gly | | | |
| 405 | 410 | 415 | |
| Pro Ser Met Gly Ala Pro Lys His Thr Ser Asp Lys Ala Phe Phe Asp | | | |
| 420 | 425 | 430 | |
| Leu Lys Thr Ser Lys Arg Val Tyr Asn Phe Cys Ala Gln Asp Gly Gln | | | |
| 435 | 440 | 445 | |
| Ser Ala Gln Gln Trp Met Asp Lys Ile Gln Ser Cys Ile Ser Asp Ala | | | |
| 450 | 455 | 460 | 464 |

<210> 1172
 <211> 256
 <212>Amino acid
 <213> Homo sapiens

| | | | |
|---|-----|-----|----|
| <400> 1172 | | | |
| Glu Val Glu Gly Pro Arg Arg Val Ser Pro Ala Pro Glu Thr Leu Gly | | | |
| 1 | 5 | 10 | 15 |
| Met Glu Glu Ser Val Val Arg Pro Ser Val Phe Val Val Asp Gly Gln | | | |
| 20 | 25 | 30 | |
| Thr Asp Ile Pro Phe Thr Arg Leu Gly Arg Ser His Arg Arg Gln Ser | | | |
| 35 | 40 | 45 | |
| Cys Ser Val Ala Arg Val Gly Leu Gly Leu Leu Leu Leu Met Gly | | | |
| 50 | 55 | 60 | |
| Ala Gly Leu Ala Val Gln Gly Trp Phe Leu Leu Gln Leu His Trp Arg | | | |
| 65 | 70 | 75 | 80 |
| Leu Gly Glu Met Val Thr Arg Leu Pro Asp Gly Pro Ala Gly Ser Trp | | | |
| 85 | 90 | 95 | |
| Glu Gln Leu Ile Gln Glu Arg Arg Ser His Glu Val Asn Pro Ala Ala | | | |
| 100 | 105 | 110 | |
| His Leu Thr Gly Ala Asn Ser Ser Leu Thr Gly Ser Gly Gly Pro Leu | | | |
| 115 | 120 | 125 | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Trp | Glu | Thr | Gln | Leu | Gly | Leu | Ala | Phe | Leu | Arg | Gly | Leu | Ser | Tyr |
| 130 | | | | 135 | | | | | | 140 | | | | | |
| His | Asp | Gly | Ala | Leu | Val | Val | Thr | Lys | Ala | Gly | Tyr | Tyr | Tyr | Ile | Tyr |
| 145 | | | | 150 | | | | 155 | | | 155 | | | | 160 |
| Ser | Lys | Val | Gln | Leu | Gly | Gly | Val | Gly | Cys | Pro | Leu | Gly | Leu | Ala | Ser |
| | | | | 165 | | | | 170 | | | 170 | | | 175 | |
| Thr | Ile | Thr | His | Gly | Leu | Tyr | Lys | Arg | Thr | Pro | Arg | Tyr | Pro | Glu | Glu |
| | 180 | | | | 185 | | | 185 | | | 190 | | | | |
| Leu | Glu | Leu | Leu | Val | Ser | Gln | Gln | Ser | Pro | Cys | Gly | Arg | Ala | Thr | Ser |
| | 195 | | | | 200 | | | 200 | | | 205 | | | | |
| Ser | Ser | Arg | Val | Trp | Trp | Asp | Ser | Ser | Phe | Leu | Gly | Gly | Val | Val | His |
| | 210 | | | | 215 | | | 215 | | | 220 | | | | |
| Leu | Glu | Ala | Gly | Glu | Glu | Val | Val | Val | Arg | Val | Leu | Asp | Glu | Arg | Leu |
| 225 | | | | | 230 | | | 230 | | | 235 | | | 240 | |
| Val | Arg | Leu | Arg | Asp | Gly | Thr | Arg | Ser | Tyr | Phe | Gly | Ala | Phe | Met | Val |
| | 245 | | | | | | | 245 | | | 250 | | | 255 | 256 |

<210> 1173
 <211> 117
 <212>Amino acid
 <213> Homo sapiens

 <220>
 <221> misc_feature
 <222> (1)...(17)
 <223> X = any amino acid or stop code

| | | | | | | | | | | | | | | | |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <400> 1173 | | | | | | | | | | | | | | | |
| Gln | Ser | Ala | Glu | Leu | Gly | Pro | Arg | Arg | Glu | Gly | Ser | Arg | Arg | Pro | |
| 1 | | | | 5 | | | 10 | | | | 15 | | | | |
| Ser | Cys | Thr | Lys | Ala | Ser | Lys | Pro | Trp | Arg | Arg | Arg | Pro | Gly | Gly | Pro |
| | 20 | | | | 25 | | | 25 | | | 30 | | | | |
| Thr | Ser | Gly | Leu | Gly | Xaa | Gly | Pro | Leu | Ser | Pro | Gly | Pro | Tyr | Gln | Cys |
| | 35 | | | | | 40 | | | | | 45 | | | | |
| Arg | Pro | Ser | Leu | Pro | Ala | Gln | Leu | Tyr | Pro | Gln | Ser | Leu | Met | Ala | Ala |
| | 50 | | | | 55 | | | 55 | | | 60 | | | | |
| Ala | Thr | Leu | Arg | Thr | Pro | Thr | Gln | Val | Ser | Ala | Ala | Ser | Ser | Arg | Pro |
| | 65 | | | | 70 | | | 70 | | | 75 | | | 80 | |
| His | Thr | Pro | Ser | Pro | Thr | His | Val | Leu | Lys | Pro | Ser | Val | Arg | Gly | Ala |
| | | | | | | 85 | | | 90 | | | 95 | | | |
| Cys | Ser | Ser | Pro | Arg | Cys | Pro | Gly | Ser | Gly | Thr | Leu | Arg | Arg | Ser | Trp |
| | 100 | | | | | 105 | | | 105 | | | 110 | | | |
| Val | Gly | Pro | Phe | | | | | | | | | | | | |
| | 115 | | 117 | | | | | | | | | | | | |

<210> 1174
 <211> 370
 <212>Amino acid
 <213> Homo sapiens

| | | | | | | | | | | | | | | | |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <400> 1174 | | | | | | | | | | | | | | | |
| Leu | Trp | Trp | Pro | Pro | Leu | Ser | Arg | His | Ala | Ala | His | Arg | Gln | Trp | Pro |

| | | | |
|---|-----|-----|-----|
| 1 | 5 | 10 | 15 |
| Gly Pro Thr Ala Pro Arg Gly Leu Gly His Lys Val Lys Gly Arg Gly | | | |
| 20 | 25 | 30 | |
| Ala Ser Pro Ala Ala Met Trp Ser Cys Ser Trp Phe Asn Gly Thr Gly | | | |
| 35 | 40 | 45 | |
| Leu Val Glu Glu Leu Pro Ala Cys Gln Asp Leu Gln Leu Gly Leu Ser | | | |
| 50 | 55 | 60 | |
| Leu Leu Ser Leu Leu Gly Leu Val Val Gly Val Pro Val Gly Leu Cys | | | |
| 65 | 70 | 75 | 80 |
| Tyr Asn Ala Leu Leu Val Leu Ala Asn Leu His Ser Lys Ala Ser Met | | | |
| 85 | 90 | 95 | |
| Thr Met Pro Asp Val Tyr Phe Val Asn Met Ala Val Ala Gly Leu Val | | | |
| 100 | 105 | 110 | |
| Leu Ser Ala Leu Ala Pro Val His Leu Leu Gly Pro Pro Ser Ser Arg | | | |
| 115 | 120 | 125 | |
| Trp Ala Leu Trp Ser Val Gly Gly Glu Val His Val Ala Leu Gln Ile | | | |
| 130 | 135 | 140 | |
| Pro Phe Asn Val Ser Ser Leu Val Ala Met Tyr Ser Thr Ala Leu Leu | | | |
| 145 | 150 | 155 | 160 |
| Ser Leu Asp His Tyr Ile Glu Arg Ala Leu Pro Arg Thr Tyr Met Ala | | | |
| 165 | 170 | 175 | |
| Ser Val Tyr Asn Thr Arg His Val Cys Gly Phe Val Trp Gly Gly Ala | | | |
| 180 | 185 | 190 | |
| Leu Leu Thr Ser Phe Ser Ser Leu Leu Phe Tyr Ile Cys Ser His Val | | | |
| 195 | 200 | 205 | |
| Ser Thr Arg Ala Leu Glu Cys Ala Lys Met Gln Asn Ala Glu Ala Ala | | | |
| 210 | 215 | 220 | |
| Asp Ala Thr Leu Val Phe Ile Gly Tyr Val Val Pro Ala Leu Ala Thr | | | |
| 225 | 230 | 235 | 240 |
| Leu Tyr Ala Leu Val Leu Leu Ser Arg Val Arg Arg Glu Asp Thr Pro | | | |
| 245 | 250 | 255 | |
| Leu Asp Arg Asp Thr Gly Arg Leu Glu Pro Ser Ala His Arg Leu Leu | | | |
| 260 | 265 | 270 | |
| Val Ala Thr Val Cys Thr Gln Phe Gly Leu Trp Thr Pro His Tyr Leu | | | |
| 275 | 280 | 285 | |
| Ile Leu Leu Gly His Thr Val Ile Ile Ser Arg Gly Lys Pro Val Asp | | | |
| 290 | 295 | 300 | |
| Ala His Tyr Leu Gly Leu Leu His Phe Val Lys Asp Phe Ser Lys Leu | | | |
| 305 | 310 | 315 | 320 |
| Leu Ala Phe Ser Ser Ser Phe Val Thr Pro Leu Leu Tyr Arg Tyr Met | | | |
| 325 | 330 | 335 | |
| Asn Gln Ser Phe Pro Ser Lys Leu Gln Arg Leu Met Lys Lys Leu Pro | | | |
| 340 | 345 | 350 | |
| Cys Gly Asp Arg His Cys Ser Pro Asp His Met Gly Val Gln Gln Val | | | |
| 355 | 360 | 365 | |
| Leu Ala | | | |
| 370 | | | |

<210> 1175

<211> 145

<212>Amino acid

<213> Homo sapiens

| | | | |
|---|----|----|----|
| <400> 1175 | | | |
| Ser Glu Ser Glu Leu Phe Thr Leu Met Pro Ser Leu Pro Thr Thr Asn | | | |
| 1 | 5 | 10 | 15 |
| Cys Val His Ser Leu Gln Met Ile Pro Pro Leu Ser Pro Ala Pro Asn | | | |
| 20 | 25 | 30 | |
| Gln Glu Leu Val Leu Gly Leu Cys Tyr Met Ser Tyr Leu Ala Phe Leu | | | |

| | | |
|---|-----|-----|
| 35 | 40 | 45 |
| Tyr Met Thr Phe Asp Phe Cys Cys Leu Tyr Phe Ser Thr Val Tyr Ala | | |
| 50 | 55 | 60 |
| Pro Ser Phe Lys Tyr Ile Cys Val His Thr Asp Thr His Ile Cys Val | | |
| 65 | 70 | 75 |
| Cys Val Cys Ile Tyr Leu Ser Ser Val Val Ser Lys Ser Ser Ala Glu | | 80 |
| 85 | 90 | 95 |
| Ala Asp Gly Val Leu Gln Pro Arg Arg His Pro Ala Ser Leu Leu Ile | | |
| 100 | 105 | 110 |
| Val Phe Ala Thr Ser Ile Ser Glu Ser Ser Leu Leu Ile Phe Ser Phe | | |
| 115 | 120 | 125 |
| Gln Lys Thr Glu Ala Lys Leu Ile Val Phe Ala Val Ser Leu Ala Ala | | |
| 130 | 135 | 140 |
| Lys | | |
| 145 | | |

<210> 1176
<211> 50
<212>Amino acid
<213> Homo sapiens

| | | |
|------------|---|---|
| <400> 1176 | | |
| Phe | Phe | Leu Arg Gln Ser Leu Thr Leu Ser Pro Arg Leu Glu Cys |
| 1 | 5 | 10 15 |
| Ser | Gly Ala Thr Ser Ala Ser Pro Ser Ala Gly Ile Thr Gly Met Ser | |
| 20 | 25 | 30 |
| His | His Ser Gln Pro Ile Val Asn Phe Leu Arg Ala Cys Ile Pro Ile | |
| 35 | 40 | 45 |
| Ser | Lys | |
| 50 | | |

<210> 1177
<211> 231
<212>Amino acid
<213> Homo sapiens

| | | |
|------------|---|-------|
| <400> 1177 | | |
| Arg | Gln His Ala Glu Glu Arg Gly Arg Arg Asn Pro Lys Thr Gly Leu | |
| 1 | 5 | 10 15 |
| Thr | Leu Glu Arg Val Gly Pro Glu Ser Ser Pro Tyr Leu Leu Arg Arg | |
| 20 | 25 | 30 |
| His | Gln Arg Gln Gly Gln Glu Gly Glu His Tyr His Ser Cys Val Gln | |
| 35 | 40 | 45 |
| Leu | Ala Pro Thr Arg Gly Leu Glu Glu Ser Gly His Gly Pro Leu Ser | |
| 50 | 55 | 60 |
| Leu | Ala Gly Gly Pro Arg Val Gly Gly Val Ala Ala Ala Ala Thr Glu | |
| 65 | 70 | 75 80 |
| Ala | Pro Arg Met Glu Trp Lys Val Lys Val Arg Ser Asp Gly Thr Arg | |
| 85 | 90 | 95 |
| Tyr | Val Ala Lys Arg Pro Val Arg Asp Arg Leu Leu Lys Ala Arg Ala | |
| 100 | 105 | 110 |
| Leu | Lys Ile Arg Glu Glu Arg Ser Gly Met Thr Thr Asp Asp Asp Ala | |
| 115 | 120 | 125 |
| Val | Ser Glu Met Lys Met Gly Arg Tyr Trp Ser Lys Glu Glu Arg Lys | |

| | | |
|---|-----|-----|
| 130 | 135 | 140 |
| Gln His Leu Ile Arg Ala Arg Glu Gln Arg Lys Arg Arg Glu Phe Met | | |
| 145 | 150 | 155 |
| Met Gln Ser Arg Leu Glu Cys Leu Arg Glu Gln Gln Asn Gly Asp Ser | | 160 |
| 165 | 170 | 175 |
| Lys Pro Glu Leu Asn Ile Ile Ala Leu Ser His Arg Lys Thr Met Lys | | |
| 180 | 185 | 190 |
| Lys Arg Asn Lys Lys Ile Leu Asp Asn Trp Ile Thr Ile Gln Glu Met | | |
| 195 | 200 | 205 |
| Leu Ala His Gly Ala Arg Ser Ala Asp Gly Lys Arg Val Tyr Asn Pro | | |
| 210 | 215 | 220 |
| Leu Leu Ser Val Thr Thr Val | | |
| 225 | 230 | 231 |

<210> 1178
<211> 204
<212>Amino acid
<213> Homo sapiens

| | | |
|---|-----|-----|
| <400> 1178 | | |
| Ser Asp Arg Gly Cys Ser Ala Ala Ala Gly Arg Asn Met Thr Ala Val | | |
| 1 | 5 | 10 |
| Gly Val Gln Ala Gln Arg Pro Leu Gly Gln Arg Gln Pro Arg Arg Ser | | 15 |
| 20 | 25 | 30 |
| Phe Phe Ser Phe Ile Arg Thr Leu Ile Ile Thr Cys Val Ala Leu | | |
| 35 | 40 | 45 |
| Ala Val Val Leu Ser Ser Val Ser Ile Cys Asp Gly His Trp Leu Leu | | |
| 50 | 55 | 60 |
| Ala Glu Asp Arg Leu Phe Gly Leu Trp His Phe Cys Thr Thr Thr Asn | | |
| 65 | 70 | 75 |
| Gln Ser Val Pro Ile Cys Phe Arg Asp Leu Gly Gln Ala His Val Pro | | 80 |
| 85 | 90 | 95 |
| Gly Leu Ala Val Gly Met Gly Leu Val Arg Ser Val Gly Ala Leu Ala | | |
| 100 | 105 | 110 |
| Val Val Ala Ala Ile Phe Gly Leu Glu Phe Leu Met Val Ser Gln Leu | | |
| 115 | 120 | 125 |
| Cys Glu Asp Lys His Ser Gln Cys Lys Trp Val Met Gly Ser Ile Leu | | |
| 130 | 135 | 140 |
| Leu Leu Val Ser Phe Val Leu Ser Ser Gly Gly Leu Leu Gly Phe Val | | |
| 145 | 150 | 155 |
| Ile Leu Leu Arg Asn Gln Val Thr Leu Ile Gly Phe Thr Leu Met Phe | | 160 |
| 165 | 170 | 175 |
| Trp Cys Glu Phe Thr Ala Ser Phe Leu Leu Phe Leu Asn Ala Ile Ser | | |
| 180 | 185 | 190 |
| Gly Leu His Ile Asn Ser Ile Thr His Pro Trp Glu | | |
| 195 | 200 | 204 |

<210> 1179
<211> 179
<212>Amino acid
<213> Homo sapiens

<400> 1179
Gln Ile Leu Pro Asn Leu Tyr Leu Gly Ser Ala Arg Asp Ser Ala Asn

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1 | 5 | 10 | 15 | | | | | | | | | | | | |
| Leu | Glu | Ser | Leu | Ala | Lys | Leu | Gly | Ile | Arg | Tyr | Ile | Leu | Asn | Val | Thr |
| | | | | | | | | | | | | | | | |
| | | | 20 | | | 25 | | | | | | | | 30 | |
| Pro | Asn | Leu | Pro | Asn | Phe | Phe | Glu | Lys | Asn | Gly | Asp | Phe | His | Tyr | Lys |
| | | | 35 | | | 40 | | | | | | | | 45 | |
| Gln | Ile | Pro | Ile | Ser | Asp | His | Trp | Ser | Gln | Asn | Leu | Ser | Arg | Phe | Phe |
| | | | 50 | | | 55 | | | | | | | | 60 | |
| Pro | Glu | Ala | Ile | Glu | Phe | Ile | Asp | Glu | Ala | Leu | Ser | Gln | Asn | Cys | Gly |
| | | | 65 | | | 70 | | | | | | | | 80 | |
| Val | Leu | Val | His | Cys | Leu | Ala | Gly | Val | Ser | Arg | Ser | Val | Thr | Val | Thr |
| | | | 85 | | | 90 | | | | | | | | 95 | |
| Val | Ala | Tyr | Leu | Met | Gln | Lys | Leu | His | Leu | Ser | Leu | Asn | Asp | Ala | Tyr |
| | | | 100 | | | 105 | | | | | | | | 110 | |
| Asp | Leu | Val | Lys | Arg | Lys | Ser | Asn | Ile | Ser | Pro | Asn | Phe | Asn | Phe | |
| | | | 115 | | | 120 | | | | | | | | 125 | |
| Met | Gly | Gln | Leu | Leu | Asp | Phe | Glu | Arg | Ser | Leu | Arg | Leu | Glu | Glu | Arg |
| | | | 130 | | | 135 | | | | | | | | 140 | |
| His | Ser | Gln | Glu | Gln | Gly | Ser | Gly | Gly | Gln | Ala | Ser | Ala | Ala | Ser | Asn |
| | | | 145 | | | 150 | | | | | | | | 155 | 160 |
| Pro | Pro | Ser | Phe | Phe | Thr | Thr | Pro | Thr | Ser | Asp | Gly | Ala | Phe | Glu | Leu |
| | | | 165 | | | | | | | | | | | 170 | 175 |
| Ala | Pro | Thr | | | | | | | | | | | | | |
| | | | 179 | | | | | | | | | | | | |

<210> 1180
<211> 159
<212>Amino acid
<213> Homo sapiens

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1 | 5 | 10 | 15 | | | | | | | | | | | | |
| Arg | Lys | Ser | Leu | His | Glu | Asn | Lys | Leu | Lys | Arg | Leu | Gln | Glu | Lys | Val |
| | | | | | | | | | | | | | | | |
| | | | 20 | | | 25 | | | | | | | | 30 | |
| Glu | Val | Leu | Glu | Ala | Lys | Lys | Glu | Glu | Leu | Glu | Thr | Glu | Asn | Gln | Val |
| | | | 35 | | | 40 | | | | | | | | 45 | |
| Arg | Leu | Lys | Asp | Ile | Gln | Arg | Arg | His | Asn | Glu | Phe | Arg | Ser | Leu | Ile |
| | | | 50 | | | 55 | | | | | | | | 60 | |
| Leu | Val | Pro | Asn | Met | Pro | Pro | Thr | Ala | Ser | Ile | Asn | Pro | Val | Ser | Phe |
| | | | 65 | | | 70 | | | | | | | | 75 | 80 |
| Gln | Ser | Ser | Ala | Met | Gly | Ser | Lys | His | Gly | Thr | Thr | Ile | Ser | Ser | Ser |
| | | | 85 | | | 90 | | | | | | | | 95 | |
| Tyr | Ala | Gly | Gly | Thr | Thr | Ser | Lys | Gly | Thr | Leu | Ser | Thr | Ser | Gln | Lys |
| | | | 100 | | | 105 | | | | | | | | 110 | |
| Thr | Arg | Arg | Thr | Gly | Asn | Asn | Thr | Lys | Lys | Thr | Thr | Arg | Gly | Thr | Trp |
| | | | 115 | | | 120 | | | | | | | | 125 | |
| Ile | Phe | Arg | Arg | Met | Met | Phe | Leu | Glu | Asn | Arg | Gln | Ile | Lys | Arg | Gly |
| | | | 130 | | | 135 | | | | | | | | 140 | |
| Glu | Val | Gly | Asp | Ser | Val | Lys | Leu | Asp | Ile | Leu | Thr | Cys | Gly | Ile | |
| | | | 145 | | | 150 | | | | | | | | 155 | 159 |

<210> 1181
<211> 328
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature

<222> (1) . . . (328)
 <223> X = any amino acid or stop code

<400> 1181
 Gly Arg Pro Gly Ala Gly Ala Ser Glu Leu Phe Pro Ser Val Thr Thr
 1 5 10 15
 Asp Leu Ser Val Ser Lys Gln Asn Ala Cys Leu Thr Cys Val Asp Phe
 20 25 30
 Val Thr Val His Val Cys Met Gly Phe Trp Gly Ile Gly Pro Gly Ala
 35 40 45
 Leu Ser Thr Ser Cys Ile Pro Tyr Pro Leu Ser His Gly Pro Gly Ser
 50 55 60
 Val Lys Ala Glu Met Leu His Met Tyr Ser Gln Lys Asp Pro Leu Ile
 65 70 75 80
 Leu Cys Val Arg Leu Ala Val Leu Leu Ala Val Thr Leu Thr Val Pro
 85 90 95
 Val Val Leu Phe Pro Ile Arg Arg Ala Leu Gln Gln Leu Leu Phe Pro
 100 105 110
 Gly Lys Ala Phe Ser Trp Pro Arg His Val Ala Ile Ala Leu Ile Leu
 115 120 125
 Leu Val Leu Val Asn Val Leu Val Ile Cys Val Pro Thr Ile Arg Asp
 130 135 140
 Ile Phe Gly Val Ile Gly Ser Thr Ser Ala Pro Ser Leu Ile Phe Ile
 145 150 155 160
 Leu Pro Ser Ile Phe Tyr Leu Arg Ile Val Pro Ser Glu Val Glu Pro
 165 170 175
 Phe Leu Ser Trp Pro Lys Ile Gln Ala Leu Cys Phe Gly Val Leu Gly
 180 185 190
 Val Leu Phe Met Ala Val Ser Leu Gly Phe Met Phe Ala Asn Trp Ala
 195 200 205
 Thr Gly Gln Ser Arg Met Ser Gly His Xaa Ser Gly Pro Ala Gly Pro
 210 215 220
 Gly Pro Cys Ala His Ala His Gly Gly Val Arg Ala Ala Pro Xaa Gly
 225 230 235 240
 Pro Ser Cys Pro Thr Cys Gly Gly Gly Trp Phe Pro Xaa Thr Trp Leu
 245 250 255
 Ser Glu Ala Gly Asp Ser Arg Gly Cys Arg Leu Ala His Phe Pro Pro
 260 265 270
 Pro Gln Gly Cys Gln Ala Trp Ile Met Ala Leu Ile Pro Thr Pro Thr
 275 280 285
 Pro Trp Glu
 290 295 300
 Glu Glu Glu Glu Ala Arg Ser Trp Trp Ser Leu Cys Pro Ala
 305 310 315 320
 Gln Ser Ser Leu Pro Pro Pro Gly
 325 328

<210> 1182
 <211> 144
 <212> Amino acid
 <213> Homo sapiens

<400> 1182
 Ile Asn Glu Leu Arg Tyr His Leu Glu Glu Ser Arg Asp Lys Asn Val
 1 5 10 15

| | | | | | | | | | | | | | | | |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Leu | Cys | Leu | Glu | Glu | Arg | Asp | Trp | Asp | Pro | Gly | Leu | Ala | Ile | Ile |
| | | | | 20 | | | | 25 | | | | 30 | | | |
| Asp | Asn | Leu | Met | Gln | Ser | Ile | Asn | Gln | Ser | Lys | Lys | Thr | Val | Phe | Val |
| | | | | 35 | | | | 40 | | | | 45 | | | |
| Leu | Thr | Lys | Lys | Tyr | Ala | Lys | Ser | Trp | Asn | Phe | Lys | Thr | Ala | Phe | Tyr |
| | | | | 50 | | | | 55 | | | 60 | | | | |
| Leu | Ala | Leu | Gln | Arg | Leu | Met | Asp | Glu | Asn | Met | Asp | Val | Ile | Ile | Phe |
| | | | | 65 | | | | 70 | | | 75 | | | | 80 |
| Ille | Leu | Leu | Glu | Pro | Val | Leu | Gln | His | Ser | Gln | Tyr | Leu | Arg | Leu | Arg |
| | | | | 85 | | | | 90 | | | 95 | | | | 95 |
| Gln | Arg | Ile | Cys | Lys | Ser | Ser | Ile | Leu | Gln | Trp | Pro | Asp | Asn | Pro | Lys |
| | | | | 100 | | | | 105 | | | 110 | | | | |
| Ala | Glu | Gly | Leu | Phe | Trp | Gln | Thr | Leu | Arg | Asn | Val | Val | Leu | Thr | Glu |
| | | | | 115 | | | | 120 | | | 125 | | | | |
| Asn | Asp | Ser | Arg | Tyr | Asn | Asn | Met | Tyr | Val | Asp | Ser | Ile | Lys | Gln | Tyr |
| | | | | 130 | | | | 135 | | | 140 | | | | 144 |

<210> 1183
 <211> 484
 <212>Amino acid
 <213> Homo sapiens

| | | | | | | | | | | | | | | | |
|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <400> 1183: | | | | | | | | | | | | | | | |
| Asp | Asp | Pro | Ile | Lys | Thr | Ser | Trp | Thr | Pro | Pro | Arg | Tyr | Val | Leu | Ser |
| 1 | | | | 5 | | | | 10 | | | 15 | | | | |
| Met | Ser | Glu | Glu | Arg | His | Glu | Arg | Val | Arg | Lys | Lys | Tyr | His | Ile | Leu |
| | | | | 20 | | | | 25 | | | 30 | | | | |
| Val | Glu | Gly | Asp | Gly | Ile | Pro | Pro | Pro | Ile | Lys | Ser | Phe | Lys | Glu | Met |
| | | | | 35 | | | | 40 | | | 45 | | | | |
| Lys | Phe | Pro | Ala | Ala | Ile | Leu | Arg | Gly | Leu | Lys | Lys | Gly | Ile | His | |
| | | | | 50 | | | | 55 | | | 60 | | | | |
| His | Pro | Thr | Pro | Ile | Gln | Ile | Gln | Gly | Ile | Pro | Thr | Ile | Leu | Ser | Gly |
| | | | | 65 | | | | 70 | | | 75 | | | | 80 |
| Arg | Asp | Met | Ile | Gly | Ile | Ala | Phe | Thr | Gly | Ser | Gly | Lys | Thr | Leu | Val |
| | | | | 85 | | | | 90 | | | 95 | | | | |
| Phe | Thr | Leu | Pro | Val | Ile | Met | Phe | Cys | Leu | Glu | Gln | Glu | Lys | Arg | Leu |
| | | | | 100 | | | | 105 | | | 110 | | | | |
| Pro | Phe | Ser | Lys | Arg | Glu | Gly | Pro | Tyr | Gly | Leu | Ile | Ile | Cys | Pro | Ser |
| | | | | 115 | | | | 120 | | | 125 | | | | |
| Arg | Glu | Leu | Ala | Arg | Gln | Thr | His | Gly | Ile | Leu | Glu | Tyr | Tyr | Cys | Arg |
| | | | | 130 | | | | 135 | | | 140 | | | | |
| Leu | Leu | Gln | Glu | Asp | Ser | Ser | Pro | Leu | Leu | Arg | Cys | Ala | Leu | Cys | Ile |
| | | | | 145 | | | | 150 | | | 155 | | | | 160 |
| Gly | Gly | Met | Ser | Val | Lys | Glu | Gln | Met | Glu | Thr | Ile | Arg | Nis | Gly | Val |
| | | | | 165 | | | | 170 | | | 175 | | | | |
| His | Met | Met | Val | Ala | Thr | Pro | Gly | Arg | Leu | Met | Asp | Leu | Leu | Gln | Lys |
| | | | | 180 | | | | 185 | | | 190 | | | | |
| Lys | Met | Val | Ser | Leu | Asp | Ile | Cys | Arg | Tyr | Leu | Ala | Leu | Asp | Glu | Ala |
| | | | | 195 | | | | 200 | | | 205 | | | | |
| Asp | Arg | Met | Ile | Asp | Met | Gly | Phe | Glu | Gly | Asp | Ile | Arg | Thr | Ile | Phe |
| | | | | 210 | | | | 215 | | | 220 | | | | |
| Ser | Tyr | Phe | Lys | Gly | Gln | Arg | Gln | Thr | Leu | Leu | Phe | Ser | Ala | Thr | Met |
| | | | | 225 | | | | 230 | | | 235 | | | | 240 |
| Pro | Lys | Lys | Ile | Gln | Asn | Phe | Ala | Lys | Ser | Ala | Leu | Val | Lys | Pro | Val |
| | | | | 245 | | | | 250 | | | 255 | | | | |
| Thr | Ile | Asn | Val | Gly | Arg | Ala | Gly | Ala | Ala | Ser | Leu | Asp | Val | Ile | Gln |
| | | | | 260 | | | | 265 | | | 270 | | | | |

Glu Val Glu Tyr Val Lys Glu Glu Ala Lys Met Val Tyr Leu Leu Glu
 275 280 285
 Cys Leu Gln Lys Thr Pro Pro Pro Val Leu Ile Phe Ala Glu Lys Lys
 290 295 300
 Ala Asp Val Asp Ala Ile His Glu Tyr Leu Leu Leu Lys Gly Val Glu
 305 310 315 320
 Ala Val Ala Ile His Gly Gly Lys Asp Gln Glu Glu Arg Thr Lys Ala
 325 330 335
 Ile Glu Ala Phe Arg Glu Gly Lys Lys Asp Val Leu Val Ala Thr Asp
 340 345 350
 Val Ala Ser Lys Gly Leu Asp Phe Pro Ala Ile Gln His Val Ile Asn
 355 360 365
 Tyr Asp Met Pro Glu Glu Ile Glu Asn Tyr Val His Arg Ile Gly Arg
 370 375 380
 Thr Gly Arg Ser Gly Asn Thr Gly Ile Ala Thr Thr Phe Ile Asn Lys
 385 390 395 400
 Ala Cys Asp Glu Ser Val Leu Met Asp Leu Lys Ala Leu Leu Leu Glu
 405 410 415
 Ala Lys Gln Lys Val Pro Pro Val Leu Gln Val Leu His Cys Gly Asp
 420 425 430
 Glu Ser Met Leu Asp Ile Gly Gly Glu Arg Gly Cys Ala Phe Cys Gly
 435 440 445
 Gly Leu Gly His Arg Ile Thr Asp Cys Pro Lys Leu Glu Ala Met Gln
 450 455 460
 Thr Lys Gln Val Ser Asn Ile Gly Arg Lys Asp Tyr Leu Ala His Ser
 465 470 475 480
 Ser Met Asp Phe
 484

<210> 1184
 <211> 125
 <212>Amino acid
 <213> Homo sapiens

<400> 1184
 Ile Glu Thr Thr Gln Pro Ser Glu Asp Thr Asn Ala Asn Ser Gln Asp
 1 5 10 15
 Asn Ser Met Gln Pro Glu Thr Ser Ser Gln Gln Gln Leu Leu Ser Pro
 20 25 30
 Thr Leu Ser Asp Arg Gly Gly Ser Arg Gln Asp Ala Ala Asp Ala Gly
 35 40 45
 Lys Pro Gln Arg Lys Phe Gly Gln Trp Arg Leu Pro Ser Ala Pro Lys
 50 55 60
 Pro Ile Ser His Ser Val Ser Ser Val Asn Leu Arg Phe Gly Gly Arg
 65 70 75 80
 Thr Thr Met Lys Ser Val Val Cys Lys Met Asn Pro Met Thr Asp Ala
 85 90 95
 Ala Ser Cys Gly Ser Glu Val Lys Lys Trp Trp Thr Arg Gln Leu Thr
 100 105 110
 Val Glu Ser Asp Glu Ser Gly Asp Asp Leu Leu Asp Ile
 115 120 125

<210> 1185
 <211> 73
 <212>Amino acid
 <213> Homo sapiens

<400> 1185
 Asn Asp Arg Phe Ser Ala Cys Tyr Phe Thr Leu Lys Leu Lys Glu Ala
 1 5 10 15
 Ala Val Arg Gln Arg Glu Ala Leu Lys Lys Leu Thr Lys Asn Ile Ala
 20 25 30
 Thr Asp Ser Tyr Ile Ser Val Asn Leu Arg Asp Val Tyr Ala Arg Ser
 35 40 45
 Ile Met Glu Met Leu Arg Leu Lys Gly Arg Glu Arg Ala Ser Thr Arg
 50 55 60
 Ser Ser Gly Gly Asp Asp Phe Trp Phe
 65 70 73

<210> 1186
<211> 343
<212>Amino acid
<213> Homo sapiens

<400> 1186
 Phe Thr Val Phe Ile Leu Gly Ile Thr Ile Arg Pro Leu Val Glu Phe
 1 5 10 15
 Leu Asp Val Lys Arg Ser Asn Lys Lys Gln Gln Ala Val Ser Glu Glu
 20 25 30
 Ile Tyr Cys Arg Leu Phe Asp His Val Lys Thr Gly Ile Glu Asp Val
 35 40 45
 Cys Gly His Trp Gly His Asn Phe Trp Arg Asp Lys Phe Lys Lys Phe
 50 55 60
 Asp Asp Lys Tyr Leu Arg Lys Leu Leu Ile Arg Glu Asn Gln Pro Lys
 65 70 75 80
 Ser Ser Ile Val Ser Leu Tyr Lys Lys Leu Glu Ile Lys His Ala Ile
 85 90 95
 Glu Met Ala Glu Thr Gly Met Ile Ser Thr Val Pro Thr Phe Ala Ser
 100 105 110
 Leu Asn Asp Cys Arg Glu Glu Lys Ile Arg Lys Val Thr Ser Ser Glu
 115 120 125
 Thr Asp Glu Ile Arg Glu Leu Leu Ser Arg Asn Leu Tyr Gln Ile Arg
 130 135 140
 Gln Arg Thr Leu Ser Tyr Asn Arg His Ser Leu Thr Ala Asp Thr Ser
 145 150 155 160
 Glu Arg Gln Ala Lys Glu Ile Leu Ile Arg Arg Arg His Ser Leu Arg
 165 170 175
 Glu Ser Ile Arg Lys Asp Ser Ser Leu Asn Arg Glu His Arg Ala Ser
 180 185 190
 Thr Ser Thr Ser Arg Tyr Leu Ser Leu Pro Lys Asn Thr Lys Leu Pro
 195 200 205
 Glu Lys Leu Gln Lys Arg Arg Thr Ile Ser Ile Ala Asp Gly Asn Ser
 210 215 220
 Ser Asp Ser Asp Ala Asp Ala Gly Thr Thr Val Leu Asn Leu Gln Pro
 225 230 235 240
 Arg Ala Arg Arg Phe Leu Pro Glu Gln Phe Ser Lys Lys Ser Pro Gln
 245 250 255
 Ser Tyr Lys Met Glu Trp Lys Asn Glu Val Asp Val Asp Ser Gly Arg
 260 265 270
 Asp Met Pro Ser Thr Pro Pro His Ser Arg Glu Lys Gly Thr
 275 280 285
 Gln Thr Ser Gly Leu Leu Gln Gln Pro Leu Leu Ser Lys Asp Gln Ser
 290 295 300

Gly Ser Glu Arg Glu Asp Ser Leu Thr Glu Gly Ile Pro Pro Lys Pro
 305 310 315 320
 Pro Pro Arg Leu Val Trp Arg Ala Ser Glu Pro Gly Ser Arg Lys Ala
 325 330 335
 Arg Phe Gly Ser Glu Lys Pro
 340 343

<210> 1187
 <211> 146
 <212>Amino acid
 <213> Homo sapiens

<400> 1187
 His Glu Glu Ala Ser Gly Leu Ser Val Trp Met Gly Lys Gln Met Glu
 1 5 10 15
 Pro Leu His Ala Val Pro Pro Ala Ala Ile Thr Leu Ile Leu Ser Leu
 20 25 30
 Leu Val Ala Val Phe Thr Glu Cys Thr Ser Asn Val Ala Thr Thr Thr
 35 40 45
 Leu Phe Leu Pro Ile Phe Ala Ser Met Ser Arg Ser Ile Gly Leu Asn
 50 55 60
 Pro Leu Tyr Ile Met Leu Pro Cys Thr Leu Ser Ala Ser Phe Ala Phe
 65 70 75 80
 Met Leu Pro Val Ala Thr Pro Pro Asn Ala Ile Val Phe Thr Tyr Gly
 85 90 95
 His Leu Lys Val Ala Asp Met Val Lys Thr Gly Val Ile Met Asn Ile
 100 105 110
 Ile Gly Val Phe Cys Val Phe Leu Ala Val Asn Thr Trp Gly Arg Ala
 115 120 125
 Ile Phe Asp Leu Asp His Phe Pro Asp Trp Ala Asn Val Thr His Ile
 130 135 140
 Glu Thr
 145 146

<210> 1188
 <211> 40
 <212>Amino acid
 <213> Homo sapiens

<400> 1188
 His Glu Leu Glu Asn Asn Trp Leu Gln His Glu Lys Ala Pro Thr Glu
 1 5 10 15
 Glu Gly Lys Lys Glu Leu Leu Ala Leu Ser Asn Ala Asn Pro Ser Leu
 20 25 30
 Leu Glu Arg His Cys Ala Tyr Leu
 35 40

<210> 1189
 <211> 62
 <212>Amino acid
 <213> Homo sapiens

<400> 1189
 Gly Asn Ile Ile Tyr Met Tyr Met Gln Pro Gly Ala Arg Ser Ser Gln
 1 5 10 15
 Asp Gln Gly Lys Phe Leu Thr Leu Phe Tyr Asn Ile Val Thr Pro Leu
 20 25 30
 Leu Asn Pro Leu Ile Tyr Thr Leu Arg Asn Arg Glu Val Lys Gly Ala
 35 40 45
 Leu Gly Arg Leu Leu Leu Gly Lys Arg Glu Leu Gly Lys Glu
 50 55 60 62

<210> 1190
<211> 623
<212>Amino acid
<213> Homo sapiens

<400> 1190
 Pro Leu Glu Gln Arg Ser Asn Cys Arg Val Asp Pro Arg Val Arg Thr
 1 5 10 15
 His Thr Met Ala Ser Asp Thr Ser Ser Leu Val Gln Ser His Thr Tyr
 20 25 30
 Lys Lys Arg Glu Pro Ala Asp Val Pro Tyr Gln Thr Gly Gln Leu His
 35 40 45
 Pro Ala Ile Arg Val Ala Asp Leu Leu Gln His Ile Thr Gln Met Lys
 50 55 60
 Cys Ala Glu Gly Tyr Gly Phe Lys Glu Glu Tyr Glu Ser Phe Phe Glu
 65 70 75 80
 Gly Gln Ser Ala Pro Trp Asp Ser Ala Lys Lys Asp Glu Asn Arg Met
 85 90 95
 Lys Asn Arg Tyr Gly Asn Ile Ile Ala Tyr Asp His Ser Arg Val Arg
 100 105 110
 Leu Gln Thr Ile Glu Gly Asp Thr Asn Ser Asp Tyr Ile Asn Gly Asn
 115 120 125
 Tyr Ile Asp Gly Tyr His Arg Pro Asn His Tyr Ile Ala Thr Gln Gly
 130 135 140
 Pro Met Gln Glu Thr Ile Tyr Asp Phe Trp Arg Met Val Trp His Glu
 145 150 155 160
 Asn Thr Ala Ser Ile Ile Met Val Thr Asn Leu Val Glu Val Gly Arg
 165 170 175
 Val Lys Cys Cys Tyr Trp Pro Asp Asp Thr Glu Ile Tyr Lys Asp
 180 185 190
 Ile Lys Val Thr Leu Ile Glu Thr Glu Leu Leu Ala Glu Tyr Val Ile
 195 200 205
 Arg Thr Phe Ala Val Glu Lys Arg Gly Val His Glu Ile Arg Glu Ile
 210 215 220
 Arg Gln Phe His Phe Thr Gly Trp Pro Asp His Gly Val Pro Tyr His
 225 230 235 240
 Ala Thr Gly Leu Leu Gly Phe Val Arg Gln Val Lys Ser Lys Ser Pro
 245 250 255
 Pro Ser Ala Gly Pro Leu Val Val His Cys Ser Ala Gly Ala Gly Arg
 260 265 270
 Thr Gly Cys Phe Ile Val Ile Asp Ile Met Leu Asp Met Ala Glu Arg
 275 280 285
 Glu Gly Val Val Asp Ile Tyr Asn Cys Val Arg Glu Leu Arg Ser Arg
 290 295 300
 Arg Val Asn Met Val Gln Thr Glu Glu Gln Tyr Val Phe Ile His Asp
 305 310 315 320

Ala Ile Leu Glu Ala Cys Leu Cys Gly Asp Thr Ser Val Pro Ala Ser
 325 330 335
 Gln Val Arg Ser Leu Tyr Tyr Asp Met Asn Lys Leu Asp Pro Gln Thr
 340 345 350
 Asn Ser Ser Gln Ile Lys Glu Glu Phe Arg Thr Leu Asn Met Val Thr
 355 360 365
 Pro Thr Leu Arg Val Glu Asp Cys Ser Ile Ala Leu Leu Pro Arg Asn
 370 375 380
 His Glu Lys Asn Arg Cys Met Asp Ile Leu Pro Pro Asp Arg Cys Leu
 385 390 395 400
 Pro Phe Leu Ile Thr Ile Asp Gly Glu Ser Ser Asn Tyr Ile Asn Ala
 405 410 415
 Ala Leu Met Asp Ser Tyr Lys Gln Pro Ser Ala Phe Ile Val Thr Gln
 420 425 430
 His Pro Leu Pro Asn Thr Val Lys Asp Phe Trp Arg Leu Val Leu Asp
 435 440 445
 Tyr His Cys Thr Ser Val Val Met Leu Asn Asp Val Asp Pro Ala Gln
 450 455 460
 Leu Cys Pro Gln Tyr Trp Pro Glu Asn Gly Val His Arg His Gly Pro
 465 470 475 480
 Ile Gln Val Glu Phe Val Ser Ala Asp Leu Glu Glu Asp Ile Ile Ser
 485 490 495
 Arg Ile Phe Arg Ile Tyr Asn Ala Ala Arg Pro Gln Asp Gly Tyr Arg
 500 505 510
 Met Val Gln Gln Phe Gln Phe Leu Gly Trp Pro Met Tyr Arg Asp Thr
 515 520 525
 Pro Val Ser Lys Arg Ser Phe Leu Lys Leu Ile Arg Gln Val Asp Lys
 530 535 540
 Trp Gln Glu Glu Tyr Asn Gly Gly Glu Gly Arg Thr Val Val His Cys
 545 550 555 560
 Leu Asn Gly Gly Arg Ser Gly Thr Phe Cys Ala Ile Ser Ile Val
 565 570 575
 Cys Glu Met Leu Arg His Gln Arg Thr Val Asp Val Phe His Ala Val
 580 585 590
 Lys Thr Leu Arg Asn Asn Lys Pro Asn Met Val Asp Leu Leu Asp Gln
 595 600 605
 Tyr Lys Phe Cys Tyr Glu Val Ala Leu Glu Tyr Leu Asn Ser Gly
 610 615 620 623

<210> 1191
 <211> 86
 <212>Amino acid
 <213> Homo sapiens

<400> 1191
 Pro Leu Thr Tyr Asn Lys Lys Tyr Thr Tyr Pro Trp Trp Gly Asp Ala
 1 5 10 15
 Leu Gly Trp Leu Leu Ala Leu Ser Ser Met Val Cys Ile Pro Ala Trp
 20 25 30
 Ser Leu Tyr Arg Leu Gly Thr Leu Lys Gly Pro Phe Arg Glu Arg Ile
 35 40 45
 Arg Gln Leu Met Cys Pro Ala Glu Asp Leu Pro Gln Arg Asn Pro Ala
 50 55 60
 Gly Pro Ser Ala Pro Ala Thr Pro Arg Thr Ser Leu Leu Arg Leu Thr
 65 70 75 80
 Glu Leu Glu Ser His Cys
 85 86

<210> 1192
<211> 109
<212>Amino acid
<213> Homo sapiens

<400> 1192
Thr Leu Ser Glu Ser Gly Ala Leu Phe Ser Leu Gly Pro Pro Pro Leu
1 5 10 15
Ser Leu Lys Ser Ser Ser Ala Pro Arg Pro Tyr Ser Thr Leu Arg Asp
20 25 30
Cys Leu Glu His Phe Ala Glu Leu Phe Asp Leu Gly Phe Pro Asn Pro
35 40 45
Leu Ala Glu Arg Ile Ile Phe Glu Thr His Gln Ile His Phe Ala Asn
50 55 60
Cys Ser Leu Gly Gln Pro Thr Phe Ser Asp Pro Pro Glu Asp Val Leu
65 70 75 80
Leu Ala Met Ile Ile Ala Pro Ile Cys Leu Ile Pro Phe Leu Ile Thr
85 90 95
Leu Val Val Trp Arg Ser Lys Asp Ser Glu Ala Gln Ala
100 105 109

<210> 1193
<211> 257
<212>Amino acid
<213> Homo sapiens

<400> 1193
Cys Glu Glu Arg Glu Gln Glu Lys Asp Asp Val Asp Val Ala Leu Leu
1 5 10 15
Pro Thr Ile Val Glu Lys Val Ile Leu Pro Lys Leu Thr Val Ile Ala
20 25 30
Glu Asn Met Trp Asp Pro Phe Ser Thr Thr Gln Thr Ser Arg Met Val
35 40 45
Gly Ile Thr Leu Lys Leu Ile Asn Gly Tyr Pro Ser Val Val Asn Ala
50 55 60
Glu Asn Lys Asn Thr Gln Val Tyr Leu Lys Ala Leu Leu Leu Arg Met
65 70 75 80
Arg Arg Thr Leu Asp Asp Asp Val Phe Met Pro Leu Tyr Pro Lys Asn
85 90 95
Val Leu Glu Asn Lys Asn Ser Gly Pro Tyr Leu Phe Phe Gln Arg Gln
100 105 110
Phe Trp Ser Ser Val Lys Leu Leu Gly Asn Phe Leu Gln Trp Tyr Gly
115 120 125
Ile Phe Ser Asn Lys Thr Leu Gln Glu Leu Ser Ile Asp Gly Leu Leu
130 135 140
Asn Arg Tyr Ile Leu Met Ala Phe Gln Asn Ser Glu Tyr Gly Asp Asp
145 150 155 160
Ser Ile Lys Lys Ala Gln Asn Val Ile Asn Cys Phe Pro Lys Gln Trp
165 170 175
Phe Met Asn Leu Lys Gly Glu Arg Thr Ile Ser Gln Leu Glu Asn Phe
180 185 190
Cys Arg Tyr Leu Val His Leu Ala Asp Thr Ile Tyr Arg Asn Ser Ile
195 200 205
Gly Cys Ser Asp Val Glu Lys Arg Asn Ala Arg Glu Asn Ile Lys Gln
210 215 220

| | | | |
|---|-------------------------|-----|-----|
| Ile Val Lys Leu Ile Ala Ser Val Arg Ala | Leu Asp His Ala Met Ser | | |
| 225 | 230 | 235 | 240 |
| Val Ala Ser Asp His Asn Val Lys Glu Phe | Lys Ser Leu Ile Glu Gly | | |
| 245 | | 250 | 255 |
| Lys | | | |
| 257 | | | |

<210> 1194
<211> 416
<212>Amino acid
<213> Homo sapiens

| | | | |
|---|-----|-----|-----|
| <400> 1194 | | | |
| Thr Pro Phe Cys Phe Leu Cys Ser Leu Val Phe Arg Ser Arg Val Trp | | | |
| 1 | 5 | 10 | 15 |
| Ala Glu Pro Cys Leu Ile Asp Ala Ala Lys Glu Glu Tyr Asn Gly Val | | | |
| 20 | 25 | 30 | |
| Ile Glu Glu Phe Leu Ala Thr Gly Glu Lys Leu Phe Gly Pro Tyr Val | | | |
| 35 | 40 | 45 | |
| Trp Gly Arg Tyr Asp Leu Phe Met Pro Pro Ser Phe Pro Phe Gly | | | |
| 50 | 55 | 60 | |
| Gly Met Glu Asn Pro Cys Leu Thr Phe Val Thr Pro Cys Leu Leu Ala | | | |
| 65 | 70 | 75 | 80 |
| Gly Asp Arg Ser Leu Ala Asp Val Ile Ile His Glu Ile Ser His Ser | | | |
| 85 | 90 | 95 | |
| Trp Phe Gly Asn Leu Val Thr Asn Ala Asn Trp Gly Glu Phe Trp Leu | | | |
| 100 | 105 | 110 | |
| Asn Glu Gly Phe Thr Met Tyr Ala Gln Arg Arg Ile Ser Thr Ile Leu | | | |
| 115 | 120 | 125 | |
| Phe Gly Ala Ala Tyr Thr Cys Leu Glu Ala Ala Thr Gly Arg Ala Leu | | | |
| 130 | 135 | 140 | |
| Leu Arg Gln His Met Asp Ile Thr Gly Glu Asn Pro Leu Asn Lys | | | |
| 145 | 150 | 155 | 160 |
| Leu Arg Val Lys Ile Glu Pro Gly Val Asp Pro Asp Asp Thr Tyr Asn | | | |
| 165 | 170 | 175 | |
| Glu Thr Pro Tyr Glu Lys Gly Phe Cys Phe Val Ser Tyr Leu Ala His | | | |
| 180 | 185 | 190 | |
| Leu Val Gly Asp Gln Asp Gln Phe Asp Ser Phe Leu Lys Ala Tyr Val | | | |
| 195 | 200 | 205 | |
| His Glu Phe Lys Phe Arg Ser Ile Leu Ala Asp Asp Phe Leu Asp Phe | | | |
| 210 | 215 | 220 | |
| Tyr Leu Glu Tyr Phe Pro Glu Leu Lys Lys Arg Val Asp Ile Ile | | | |
| 225 | 230 | 235 | 240 |
| Pro Gly Phe Glu Phe Asp Arg Trp Leu Asn Thr Pro Gly Trp Pro Pro | | | |
| 245 | 250 | 255 | |
| Tyr Leu Pro Asp Leu Ser Pro Gly Asp Ser Leu Met Lys Pro Ala Glu | | | |
| 260 | 265 | 270 | |
| Glu Leu Ala Gln Leu Trp Ala Ala Glu Glu Leu Asp Met Lys Ala Ile | | | |
| 275 | 280 | 285 | |
| Glu Ala Val Ala Ile Ser Pro Trp Lys Thr Tyr Gln Leu Val Tyr Phe | | | |
| 290 | 295 | 300 | |
| Leu Asp Lys Ile Leu Gln Lys Ser Pro Leu Pro Phe Asn Val Lys | | | |
| 305 | 310 | 315 | 320 |
| Lys Leu Gly Asp Thr Tyr Pro Ser Ile Ser Asn Ala Arg Asn Ala Glu | | | |
| 325 | 330 | 335 | |
| Leu Arg Leu Arg Trp Gly Gln Ile Val Leu Lys Asn Asp His Gln Glu | | | |
| 340 | 345 | 350 | |
| Asp Phe Trp Lys Val Lys Glu Phe Leu His Asn Gln Gly Lys Gln Lys | | | |
| 355 | 360 | 365 | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Tyr | Thr | Leu | Pro | Leu | Tyr | His | Ala | Met | Met | Gly | Gly | Ser | Glu | Val | Ala |
| 370 | | | | | 375 | | | | | 380 | | | | | |
| Gln | Thr | Leu | Ala | Lys | Glu | Thr | Phe | Ala | Ser | Thr | Ala | Ser | Gln | Leu | His |
| 385 | | | | | 390 | | | | | 395 | | | | | 400 |
| Ser | Asn | Val | Val | Asn | Tyr | Val | Gln | Gln | Ile | Val | Ala | Pro | Lys | Gly | Ser |
| | | | | | 405 | | | | 410 | | | | 415 | 416 | |

<210> 1195
<211> 295
<212>Amino acid
<213> Homo sapiens

| | | | | | | | | | | | | | | | |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <400> 1195 | | | | | | | | | | | | | | | |
| Cys | Ala | Ser | Gly | Ser | Ser | Gly | Trp | Arg | Pro | Val | Leu | Trp | Ala | Gly | Ala |
| 1 | | | | | | | 5 | | | 10 | | | | 15 | |
| Phe | Thr | Met | Ala | Ser | Ala | Glu | Leu | Asp | Tyr | Thr | Ile | Glu | Ile | Pro | Asp |
| | | | | | | | 20 | | | 25 | | | | 30 | |
| Gln | Pro | Cys | Trp | Ser | Gln | Lys | Asn | Ser | Pro | Ser | Pro | Gly | Gly | Lys | Glu |
| | | | | | | 35 | | | 40 | | | 45 | | | |
| Ala | Glu | Thr | Arg | Gln | Pro | Val | Val | Ile | Leu | Leu | Gly | Trp | Gly | Gly | Cys |
| | 50 | | | | | | | 55 | | | 60 | | | | |
| Lys | Asp | Lys | Asn | Leu | Ala | Lys | Tyr | Ser | Ala | Ile | Tyr | His | Lys | Arg | Gly |
| 65 | | | | | | 70 | | | | 75 | | | 80 | | |
| Cys | Ile | Val | Ile | Arg | Tyr | Thr | Ala | Pro | Trp | His | Met | Val | Phe | Phe | Ser |
| | | | | 85 | | | | | 90 | | | 95 | | | |
| Glu | Ser | Leu | Gly | Ile | Pro | Ser | Leu | Arg | Val | Leu | Ala | Gln | Lys | Leu | Leu |
| | | | | 100 | | | | 105 | | | | | 110 | | |
| Glu | Leu | Leu | Phe | Asp | Tyr | Glu | Ile | Glu | Lys | Glu | Pro | Leu | Leu | Phe | His |
| | | | | | | | 115 | | | 120 | | | 125 | | |
| Val | Phe | Ser | Asn | Gly | Gly | Val | Met | Leu | Tyr | Arg | Tyr | Val | Leu | Glu | Leu |
| | | | | | | | 130 | | | 135 | | | 140 | | |
| Leu | Gln | Thr | Arg | Arg | Phe | Cys | Arg | Leu | Arg | Val | Val | Gly | Thr | Ile | Phe |
| 145 | | | | | | 150 | | | | | 155 | | | 160 | |
| Asp | Ser | Ala | Pro | Gly | Asp | Ser | Asn | Leu | Val | Gly | Ala | Leu | Arg | Ala | Leu |
| | | | | | | | 165 | | | 170 | | | 175 | | |
| Ala | Ala | Ile | Leu | Glu | Arg | Arg | Ala | Ala | Met | Leu | Arg | Leu | Leu | Leu | |
| | | | | | | | 180 | | | 185 | | | 190 | | |
| Val | Ala | Phe | Ala | Leu | Val | Val | Val | Phe | His | Val | Leu | Leu | Ala | Pro | |
| | | | | | | | 195 | | | 200 | | | 205 | | |
| Ile | Thr | Ala | Leu | Phe | His | Thr | His | Phe | Tyr | Asp | Arg | Leu | Gln | Asp | Ala |
| | | | | | | | 210 | | | 215 | | | 220 | | |
| Gly | Ser | Arg | Trp | Pro | Glu | Leu | Tyr | Leu | Tyr | Ser | Arg | Ala | Asp | Glu | Val |
| 225 | | | | | | | 230 | | | | 235 | | | 240 | |
| Val | Leu | Ala | Arg | Asp | Ile | Glu | Arg | Met | Val | Glu | Ala | Arg | Leu | Ala | Arg |
| | | | | | | | 245 | | | 250 | | | 255 | | |
| Arg | Val | Leu | Ala | Arg | Ser | Val | Asp | Phe | Val | Ser | Ser | Ala | His | Val | Ser |
| | | | | | | | 260 | | | 265 | | | 270 | | |
| His | Leu | Arg | Asp | Tyr | Pro | Thr | Tyr | Tyr | Thr | Ser | Leu | Cys | Val | Asp | Phe |
| | | | | | | | 275 | | | 280 | | | 285 | | |
| Met | Arg | Asn | Trp | Val | Arg | Cys | | | | | | | | | |
| | | | | 290 | | | 295 | | | | | | | | |

<210> 1196
<211> 97
<212>Amino acid
<213> Homo sapiens

<400> 1196
 Pro Arg Val Arg Asp Arg Leu Pro Ser Thr Gly Val Arg Asp Arg Lys
 1 5 10 15
 Gly Asp Lys Pro Trp Lys Glu Ser Gly Gly Ser Val Glu Ala Pro Arg
 20 25 30
 Met Gly Phe Thr His Pro Pro Gly His Leu Ser Gly Cys Gln Ser Ser
 35 40 45
 Leu Ala Ser Gly Glu Thr Gly Thr Gly Ser Ala Asp Pro Pro Gly Gly
 50 55 60
 Pro Arg Pro Gly Ieu Thr Arg Arg Ala Pro Val Lys Asp Thr Pro Gly
 65 70 75 80
 Arg Ala Pro Ala Ala Asp Ala Ala Pro Ala Gly Pro Ser Ser Cys Leu
 85 90 95
 Gly
 97

<210> 1197
 <211> 204
 <212>Amino acid
 <213> Homo sapiens

<400> 1197
 Gln Gly Arg Thr Ser Cys Ile Gly Leu Tyr Thr Tyr Gln Arg Arg Ile
 1 5 10 15
 Cys Lys Tyr Arg Asp Gln Tyr Asn Trp Phe Phe Leu Ala Arg Pro Thr
 20 25 30
 Thr Phe Ala Ile Ile Glu Asn Leu Lys Tyr Phe Leu Leu Lys Lys Asp
 35 40 45
 Pro Ser Gln Pro Phe Tyr Leu Gly His Thr Ile Lys Ser Gly Asp Leu
 50 55 60
 Glu Tyr Val Gly Met Glu Gly Gly Ile Val Leu Ser Val Glu Ser Met
 65 70 75 80
 Lys Arg Leu Asn Ser Leu Leu Asn Ile Pro Glu Lys Cys Pro Glu Gln
 85 90 95
 Gly Gly Met Ile Tyr Lys Ile Ser Glu Asp Lys Gln Leu Ala Val Cys
 100 105 110
 Leu Lys Tyr Ala Gly Val Phe Ala Glu Asn Ala Glu Asp Ala Asp Gly
 115 120 125
 Lys Asp Val Phe Asn Thr Lys Ser Val Gly Leu Ser Ile Lys Glu Ala
 130 135 140
 Met Thr Tyr His Pro Asn Gln Val Val Glu Gly Cys Ser Asp Met
 145 150 155 160
 Ala Val Thr Phe Asn Gly Leu Thr Pro Asn Gln Met His Val Met Met
 165 170 175
 Tyr Gly Val Tyr Arg Leu Arg Ala Phe Gly His Ile Phe Asn Asp Ala
 180 185 190
 Leu Val Phe Leu Pro Pro Asn Gly Ser Asp Asn Asp
 195 200 204

<210> 1198
 <211> 238
 <212>Amino acid
 <213> Homo sapiens

<400> 1198
 His Glu Gly Lys Pro Thr Arg Gly Arg Gly Arg Gly Ser Leu Ser
 1 5 10 15
 Thr Arg Gly Arg Gly Ser Glu Val Pro Asp Ser Ala His Leu Ala Pro
 20 25 30
 Thr Pro Leu Phe Ser Glu Ser Gly Cys Cys Gly Leu Arg Ser Arg Phe
 35 40 45
 Leu Thr Asp Cys Lys Met Glu Glu Gly Gly Asn Leu Gly Gly Leu Ile
 50 55 60
 Lys Met Val His Leu Leu Val Leu Ser Gly Ala Trp Gly Met Gln Met
 65 70 75 80
 Trp Val Thr Phe Val Ser Gly Phe Leu Leu Phe Arg Ser Leu Pro Arg
 85 90 95
 His Thr Phe Gly Leu Val Gln Ser Lys Leu Phe Pro Phe Tyr Phe His
 100 105 110
 Ile Ser Met Gly Cys Ala Phe Ile Asn Leu Cys Ile Leu Ala Ser Gln
 115 120 125
 His Ala Trp Ala Gln Leu Thr Phe Trp Glu Ala Ser Gln Leu Tyr Leu
 130 135 140
 Leu Phe Leu Ser Leu Thr Leu Ala Thr Val Asn Ala Arg Trp Leu Glu
 145 150 155 160
 Pro Arg Thr Thr Ala Ala Met Trp Ala Leu Gln Thr Val Glu Lys Glu
 165 170 175
 Arg Gly Leu Gly Gly Glu Val Pro Gly Ser His Gln Gly Pro Asp Pro
 180 185 190
 Tyr Arg Gln Leu Arg Glu Lys Asp Pro Lys Tyr Ser Ala Leu Arg Gln
 195 200 205
 Asn Phe Phe Arg Tyr His Gly Leu Ser Ser Leu Cys Asn Leu Gly Cys
 210 215 220
 Val Leu Ser Asn Gly Leu Cys Leu Ala Ala Leu Pro Trp Lys
 225 230 235 238

<210> 1199
 <211> 100
 <212>Amino acid
 <213> Homo sapiens

<400> 1199
 Lys Gln Leu Asp Lys Gln Leu Arg Ala Asp Pro Ser Gly Ser Leu Pro
 1 5 10 15
 Pro Leu Pro Pro Ser Pro Pro Pro Pro Leu Glu Ala Gly Gly Arg Pro
 20 25 30
 Pro Glu Val Pro Pro Arg Gly Pro Ser Ala Val Pro Ser Phe Pro Ser
 35 40 45
 Val Ser Gly Asp Trp Gly Gly Pro Val Glu Ala Gly Glu Gly Gly Gln
 50 55 60
 Gln Gly Arg Gly Arg Ala Arg Ala Arg Pro Cys Ser Leu Pro Pro Leu
 65 70 75 80
 Leu Pro Pro Ser Pro Val Cys Arg Leu Ser Gly Ser Arg Ala Pro Leu
 85 90 95
 Gly Cys Asp Gly
 100

<210> 1200
<211> 194
<212>Amino acid
<213> Homo sapiens

<400> 1200
Arg Asn Gln Leu Ser Ser Gln Ser Val Pro Trp Val Pro Ile Leu
1 5 10 15
Lys Ser Leu Pro Leu Trp Ala Ile Val Val Ala His Phe Ser Tyr Asn
20 25 30
Trp Thr Phe Tyr Thr Leu Leu Thr Leu Leu Pro Thr Tyr Met Lys Glu
35 40 45
Ile Leu Arg Phe Asn Val Gln Glu Asn Gly Phe Leu Ser Ser Leu Pro
50 55 60
Tyr Leu Gly Ser Trp Leu Cys Met Ile Leu Ser Gly Gln Ala Ala Asp
65 70 75 80
Asn Leu Arg Ala Lys Trp Asn Phe Ser Thr Leu Cys Val Arg Arg Ile
85 90 95
Phe Ser Leu Ile Gly Met Ile Gly Pro Ala Val Phe Leu Val Ala Ala
100 105 110
Gly Phe Ile Gly Cys Asp Tyr Ser Leu Ala Val Ala Phe Leu Thr Ile
115 120 125
Ser Thr Thr Leu Gly Gly Phe Cys Ser Ser Gly Phe Ser Ile Asn His
130 135 140
Leu Asp Ile Ala Pro Ser Tyr Ala Gly Ile Leu Leu Gly Ile Thr Asn
145 150 155 160
Thr Phe Ala Thr Ile Pro Gly Met Val Gly Pro Val Ile Ala Lys Ser
165 170 175
Leu Thr Pro Asp Met Gly Ile Ser Leu His Arg Pro Gly Trp Ser Ala
180 185 190
Val Ala
194

<210> 1201
<211> 119
<212>Amino acid
<213> Homo sapiens

<400> 1201
Gly Pro Ser Gly Thr Thr His Ala Ser Ala His Ser Gly His Pro Gly
1 5 10 15
Ser Pro Arg Gly Ser Leu Ser Arg His Pro Ser Ser Gln Leu Ala Gly
20 25 30
Pro Gly Val Glu Gly Gly Glu Gly Thr Gln Lys Pro Arg Asp Tyr Ile
35 40 45
Ile Leu Ala Ile Leu Ser Cys Phe Cys Pro Met Trp Pro Val Asn Ile
50 55 60
Val Ala Phe Ala Tyr Ala Val Met Ser Arg Asn Ser Leu Gln Gln Gly
65 70 75 80
Asp Val Asp Gly Ala Gln Arg Leu Gly Arg Val Ala Lys Leu Leu Ser
85 90 95
Ile Val Ala Leu Val Gly Gly Val Leu Ile Ile Ala Ser Cys Val
100 105 110
Ile Asn Leu Gly Val Tyr Lys
115 119

<210> 1202
<211> 66
<212>Amino acid
<213> Homo sapiens

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<400> 1202
Ser Leu Phe Leu Ser Phe Pro Pro Leu Ser Phe Lys Met Thr Leu Asn
      1           5           10          15
Asp Ala Met Arg Asn Lys Ala Arg Leu Ser Ile Thr Gly Ser Thr Gly
      20          25          30
Glu Asn Gly Arg Val Met Thr Pro Glu Phe Pro Lys Ala Val His Ala
      35          40          45
Val Pro Tyr Val Ser Pro Gly Met Gly Met Asn Val Ser Val Thr Asp
      50          55          60
Leu Ser
      65          65

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<210> 1203
<211> 509
<212>Amino acid
<213> Homo sapiens

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<400> 1203
Asp Asp Val Pro Pro Ala Pro Asp Leu Tyr Asp Val Pro Pro Gly
      1           5          10          15
Leu Arg Arg Pro Gly Pro Gly Thr Leu Tyr Asp Val Pro Arg Glu Arg
      20          25          30
Val Leu Pro Pro Glu Val Ala Asp Gly Gly Val Val Asp Ser Gly Val
      35          40          45
Tyr Ala Val Pro Pro Pro Ala Glu Arg Glu Ala Pro Ala Glu GLY Lys
      50          55          60
Arg Leu Ser Ala Ser Ser Thr Gly Ser Thr Arg Ser Ser Gln Ser Ala
      65          70          75          80
Ser Ser Leu Glu Val Ala Gly Pro Gly Arg Glu Pro Leu Glu Leu Glu
      85          90          95
Val Ala Val Glu Ala Leu Ala Arg Leu Gln Gln Gly Val Ser Ala Thr
      100         105         110
Val Ala His Leu Leu Asp Leu Ala Gly Ser Ala Gly Ala Thr Gly Ser
      115         120         125
Trp Arg Ser Pro Ser Glu Pro Gln Glu Pro Leu Val Gln Asp Leu Gln
      130         135         140
Ala Ala Val Ala Ala Val Gln Ser Ala Val His Glu Leu Leu Glu Phe
      145         150         155         160
Ala Arg Ser Ala Val Gly Asn Ala Ala His Thr Ser Asp Arg Ala Leu
      165         170         175
His Ala Lys Leu Ser Arg Gln Leu Gln Lys Met Glu Asp Val His Gln
      180         185         190
Thr Leu Val Ala His Gly Gln Ala Leu Asp Ala Gly Arg Gly Gly Ser
      195         200         205
Gly Ala Thr Leu Glu Asp Leu Asp Arg Leu Val Ala Cys Ser Arg Ala
      210         215         220
Val Pro Glu Asp Ala Lys Gln Leu Ala Ser Phe Leu His Gly Asn Ala
      225         230         235

```

Ser Leu Leu Phe Arg Arg Thr Lys Ala Thr Ala Pro Gly Pro Glu Gly
 245 250 255
 Gly Gly Thr Leu His Pro Asn Pro Thr Asp Lys Thr Ser Ser Ile Glu
 260 265 270
 Ser Arg Pro Leu Pro Ser Pro Pro Lys Phe Thr Ser Gln Asp Ser Pro
 275 280 285
 Asp Gly Gln Tyr Glu Asn Ser Glu Gly Gly Trp Met Glu Asp Tyr Asp
 290 295 300
 Tyr Val His Leu Gln Gly Lys Glu Glu Phe Glu Lys Thr Gln Lys Glu
 305 310 315 320
 Leu Leu Glu Lys Gly Ser Ile Thr Arg Gln Gly Lys Ser Gln Leu Glu
 325 330 335
 Leu Gln Gln Leu Lys Gln Phe Glu Arg Leu Glu Gln Glu Val Ser Arg
 340 345 350
 Pro Ile Asp His Asp Leu Ala Asn Trp Thr Pro Ala Gln Pro Leu Ala
 355 360 365
 Pro Gly Arg Thr Gly Gly Leu Gly Pro Ser Asp Arg Gln Leu Leu Leu
 370 375 380
 Phe Tyr Leu Glu Gln Cys Glu Ala Asn Leu Thr Thr Leu Thr Asn Ala
 385 390 395 400
 Val Asp Ala Phe Phe Thr Ala Val Ala Thr Asn Gln Pro Pro Lys Ile
 405 410 415
 Phe Val Ala His Ser Lys Phe Val Ile Leu Ser Ala His Lys Leu Val
 420 425 430
 Phe Ile Gly Asp Thr Leu Ser Arg Gln Ala Ala Lys Ala Ala Asp Val Arg
 435 440 445
 Ser Gln Val Thr His Tyr Ser Asn Leu Leu Cys Asp Leu Leu Arg Gly
 450 455 460
 Ile Val Ala Thr Thr Lys Ala Ala Ala Leu Gln Tyr Pro Ser Pro Ser
 465 470 475 480
 Ala Ala Gln Asp Met Val Glu Arg Val Lys Glu Leu Gly His Ser Thr
 485 490 495
 Gln Gln Phe Arg Arg Val Leu Gly Gln Leu Ala Ala Ala
 500 505 509

<210> 1204
 <211> 453
 <212>Amino acid
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(453)
 <223> X = any amino acid or stop code

<400> 1204
 Glu Met Glu Glu Pro Gln Lys Ser Tyr Val Asn Thr Met Asp Leu Glu
 1 5 10 15
 Arg Asp Glu Pro Leu Lys Ser Thr Gly Pro Gln Ile Ser Val Ser Glu
 20 25 30
 Phe Ser Cys His Cys Cys Tyr Asp Ile Leu Val Asn Pro Thr Thr Leu
 35 40 45
 Asn Cys Gly His Ser Phe Cys Arg His Cys Leu Ala Leu Trp Trp Ala
 50 55 60
 Ser Ser Lys Lys Thr Glu Cys Pro Glu Cys Arg Glu Lys Trp Glu Gly
 65 70 75 80
 Phe Pro Lys Val Ser Ile Leu Leu Arg Asp Ala Ile Glu Lys Leu Phe
 85 90 95
 Pro Asp Ala Ile Arg Leu Arg Phe Glu Asp Ile Gln Gln Asn Asn Asp

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ile | Val | Gln | 100 | 105 | 110 | | | | | | | | | | |
| Ser | Leu | Ala | Ala | Phe | Gln | Lys | Tyr | Gly | Asn | Asp | Gln | Ile | | | |
| 115 | | | | 120 | | 125 | | | | | | | | | |
| Pro | Leu | Ala | Pro | Asn | Thr | Gly | Arg | Ala | Asn | Gln | Met | Gly | Gly | | |
| 130 | | | | 135 | | 140 | | | | | | | | | |
| Phe | Phe | Ser | Gly | Val | Leu | Thr | Ala | Leu | Thr | Gly | Val | Ala | Val | Val | Leu |
| 145 | | | | 150 | | 155 | | | | | | | | | 160 |
| Leu | Val | Tyr | His | Trp | Ser | Ser | Arg | Glu | Ser | Glu | His | Asp | Leu | Leu | Val |
| 165 | | | | 170 | | 175 | | | | | | | | | |
| His | Lys | Ala | Val | Ala | Lys | Trp | Thr | Ala | Glu | Glu | Val | Val | Leu | Trp | Leu |
| 180 | | | | 185 | | 190 | | | | | | | | | |
| Glu | Gln | Leu | Gly | Pro | Trp | Ala | Ser | Leu | Tyr | Arg | Glu | Arg | Phe | Leu | Ser |
| 195 | | | | 200 | | 205 | | | | | | | | | |
| Glu | Arg | Val | Asn | Gly | Arg | Leu | Leu | Leu | Thr | Leu | Thr | Glu | Glu | Glu | Phe |
| 210 | | | | 215 | | 220 | | | | | | | | | |
| Ser | Lys | Thr | Pro | Tyr | Thr | Ile | Glu | Asn | Ser | Ser | His | Arg | Arg | Ala | Ile |
| 225 | | | | 230 | | 235 | | | | | | | | | 240 |
| Leu | Met | Glu | Leu | Glu | Arg | Val | Lys | Ala | Leu | Gly | Val | Lys | Pro | Pro | Gln |
| 245 | | | | 250 | | 255 | | | | | | | | | |
| Asn | Leu | Trp | Glu | Tyr | Lys | Ala | Val | Asn | Pro | Gly | Arg | Ser | Leu | Phe | Leu |
| 260 | | | | 265 | | 270 | | | | | | | | | |
| Leu | Tyr | Ala | Leu | Lys | Ser | Ser | Pro | Arg | Leu | Ser | Leu | Leu | Tyr | Leu | Tyr |
| 275 | | | | 280 | | 285 | | | | | | | | | |
| Leu | Phe | Asp | Tyr | Thr | Asp | Thr | Phe | Leu | Pro | Phe | Ile | His | Thr | Ile | Cys |
| 290 | | | | 295 | | 300 | | | | | | | | | |
| Pro | Leu | Gln | Glu | Asp | Ser | Ser | Gly | Glu | Asp | Ile | Val | Thr | Lys | Leu | Leu |
| 305 | | | | 310 | | 315 | | | | | | | | | 320 |
| Asp | Leu | Lys | Glu | Pro | Thr | Trp | Lys | Glu | Trp | Arg | Glu | Phe | Leu | Val | Lys |
| 325 | | | | 330 | | 335 | | | | | | | | | |
| Tyr | Ser | Phe | Leu | Pro | Tyr | Gln | Leu | Ile | Ala | Glu | Phe | Ala | Trp | Asp | Trp |
| 340 | | | | 345 | | 350 | | | | | | | | | |
| Leu | Glu | Val | His | Tyr | Trp | Thr | Ser | Arg | Phe | Leu | Ile | Ile | Asn | Ala | Met |
| 355 | | | | 360 | | 365 | | | | | | | | | |
| Leu | Leu | Ser | Val | Leu | Glu | Leu | Phe | Ser | Phe | Trp | Arg | Ile | Trp | Ser | Arg |
| 370 | | | | 375 | | 380 | | | | | | | | | |
| Ser | Glu | Leu | Lys | Xaa | Val | Gly | Phe | Arg | Phe | Leu | Arg | Leu | Gly | Val | Ala |
| 385 | | | | 390 | | 395 | | | | | | | | | 400 |
| Ala | Leu | Gly | Ser | Val | Glu | Val | Ala | Gly | Leu | Arg | Gly | Val | Val | Lys | Gly |
| 405 | | | | 410 | | 415 | | | | | | | | | |
| Glu | Arg | Pro | Leu | Leu | Tyr | Gly | His | Gly | Ala | Gly | Ala | Arg | Phe | Pro | His |
| 420 | | | | 425 | | 430 | | | | | | | | | |
| Ser | Val | Leu | Leu | Leu | Pro | Val | Ala | Lys | Pro | Leu | Pro | Leu | Pro | Leu | Leu |
| 435 | | | | 440 | | 445 | | | | | | | | | |
| Pro | Arg | Gly | Leu | Cys | | | | | | | | | | | |
| 450 | | | | 453 | | | | | | | | | | | |

<210> 1205
 <211> 80
 <212>Amino acid
 <213> Homo sapiens

<400> 1205
 Glu Lys Ala Arg Met Ile Tyr Glu Asp Tyr Ile Ser Ile Leu Ser Pro
 1 5 10 15
 Lys Glu Val Ser Leu Asp Ser Arg Val Arg Glu Val Ile Asn Arg Asn
 20 25 30
 Leu Leu Asp Pro Asn Pro His Met Tyr Glu Asp Ala Gln Leu Gln Ile
 35 40 45
 Tyr Thr Leu Met His Arg Asp Ser Phe Pro Arg Phe Leu Asn Ser Gln

| | | |
|---|----|----|
| 50 | 55 | 60 |
| Ile Tyr Lys Ser Phe Val Glu Ser Thr Ala Gly Ser Ser Ser Glu Ser | | |
| 65 | 70 | 75 |
| | | 80 |

<210> 1206
<211> 205
<212>Amino acid
<213> Homo sapiens

| | | | | | | | | | | | | | | | | |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <400> 1206 | | | | | | | | | | | | | | | | |
| Leu | Tyr | Tyr | Ser | Gln | Asp | Glu | Glu | Ser | Lys | Ile | Met | Ile | Ser | Asp | Phe | |
| 1 | | | | | | | | | | | | | | | | |
| | | | | | | 5 | 10 | 15 | | | | | | | | |
| Gly | Leu | Leu | Ser | Lys | Met | Glu | Gly | Lys | Gly | Asp | Val | Met | Ser | Thr | Ala | Cys |
| | | | | | | | | | | | | | | | | |
| | | | | | | 20 | 25 | 30 | | | | | | | | |
| Gly | Thr | Pro | Gly | Tyr | Val | Ala | Pro | Glu | Val | Leu | Ala | Gln | Lys | Pro | Tyr | |
| | | | | | | | | | | | | | | | | |
| | | | | | | 35 | 40 | 45 | | | | | | | | |
| Ser | Lys | Ala | Val | Asp | Cys | Trp | Ser | Ile | Gly | Val | Ile | Ala | Tyr | Ile | Leu | |
| | | | | | | | | | | | | | | | | |
| | | | | | | 50 | 55 | 60 | | | | | | | | |
| Leu | Cys | Gly | Tyr | Pro | Pro | Phe | Tyr | Asp | Glu | Asn | Asp | Ser | Lys | Leu | Phe | |
| | | | | | | | | | | | | | | | | |
| | | | | | | 65 | 70 | 75 | 80 | | | | | | | |
| Glu | Gln | Ile | Leu | Lys | Ala | Glu | Tyr | Glu | Phe | Asp | Ser | Pro | Tyr | Trp | Asp | |
| | | | | | | | | | | | | | | | | |
| | | | | | | 85 | 90 | 95 | | | | | | | | |
| Asp | Ile | Ser | Asp | Ser | Ala | Lys | Asp | Phe | Ile | Arg | Asn | Leu | Met | Glu | Lys | |
| | | | | | | | | | | | | | | | | |
| | | | | | | 100 | 105 | 110 | | | | | | | | |
| Asp | Pro | Asn | Lys | Arg | Tyr | Thr | Cys | Glu | Gln | Ala | Ala | Arg | His | Pro | Trp | |
| | | | | | | | | | | | | | | | | |
| | | | | | | 115 | 120 | 125 | | | | | | | | |
| Ile | Ala | Gly | Asp | Thr | Ala | Leu | Asn | Lys | Ile | His | Glu | Ser | Val | Ser | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | 130 | 135 | 140 | | | | | | | | |
| Ala | Gln | Ile | Arg | Lys | Asn | Phe | Ala | Lys | Ser | Lys | Trp | Arg | Gln | Ala | Phe | |
| | | | | | | | | | | | | | | | | |
| | | | | | | 145 | 150 | 155 | 160 | | | | | | | |
| Asn | Ala | Thr | Ala | Val | Val | Arg | His | Met | Arg | Lys | Leu | His | Leu | Gly | Ser | |
| | | | | | | | | | | | | | | | | |
| | | | | | | 165 | 170 | 175 | | | | | | | | |
| Ser | Leu | Asp | Ser | Ser | Asn | Ala | Ser | Val | Ser | Ser | Ser | Leu | Ser | Leu | Ala | |
| | | | | | | | | | | | | | | | | |
| | | | | | | 180 | 185 | 190 | | | | | | | | |
| Ser | Gln | Lys | Asp | Cys | Ala | Ser | Gly | Thr | Phe | His | Ala | Leu | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | 195 | 200 | 205 | | | | | | | | |

<210> 1207
<211> 117
<212>Amino acid
<213> Homo sapiens

| | | | | | | | | | | | | | | | | |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| <400> 1207 | | | | | | | | | | | | | | | | |
| Arg | Thr | Arg | Gly | Gly | Ala | Val | Ser | Phe | Glu | Asp | Phe | Ile | Lys | Gly | Leu | |
| 1 | | | | | | | | | 5 | 10 | 15 | | | | | |
| Ser | Ile | Leu | Leu | Arg | Gly | Thr | Val | Gln | Glu | Lys | Leu | Asn | Trp | Ala | Phe | |
| | | | | | | | | | | | | | | | | |
| | | | | | | 20 | 25 | 30 | | | | | | | | |
| Asn | Leu | Tyr | Asp | Ile | Asn | Lys | Asp | Gly | Tyr | Ile | Thr | Lys | Glu | Glu | Met | |
| | | | | | | | | | | | | | | | | |
| | | | | | | 35 | 40 | 45 | | | | | | | | |
| Leu | Asp | Ile | Met | Lys | Ala | Ile | Tyr | Asp | Met | Met | Gly | Lys | Cys | Thr | Tyr | |
| | | | | | | | | | | | | | | | | |
| | | | | | | 50 | 55 | 60 | | | | | | | | |
| Pro | Val | Leu | Lys | Glu | Asp | Ala | Pro | Arg | Gln | His | Val | Glu | Thr | Phe | Phe | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 65 | 70 | 75 | 80 | | | | | | | | | | | | |
| Gln | Lys | Met | Asp | Lys | Asn | Lys | Asp | Gly | Val | Val | Thr | Ile | Asp | Glu | Phe |
| | | | | | | | | | | | | | | | |
| | | | | 85 | | 90 | | | | | | | | 95 | |
| Ile | Glu | Ser | Cys | Gln | Lys | Asp | Glu | Asn | Ile | Met | Arg | Ser | Met | Gln | Leu |
| | | | | | | | | | | | | | | | |
| | | | | 100 | | 105 | | | | | | | | | 110 |
| Phe | Glu | Asn | Val | Ile | | | | | | | | | | | |
| | | | | 115 | | 117 | | | | | | | | | |

<210> 1208
<211> 337
<212>Amino acid
<213> Homo sapiens

| | | | | | | | | | | | | | | | |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <400> 1208 | | | | | | | | | | | | | | | |
| Pro | Arg | Ser | Pro | Glu | His | His | Thr | Pro | Ala | Trp | His | Glu | Gly | Arg | Ser |
| 1 | | | | 5 | | | | 10 | | | | 15 | | | |
| Leu | Gly | Pro | Ile | Met | Ala | Ser | Met | Ala | Asp | Arg | Asn | Met | Lys | Leu | Phe |
| | | | | 20 | | | | 25 | | | | 30 | | | |
| Ser | Gly | Arg | Val | Val | Pro | Ala | Gln | Gly | Glu | Glu | Thr | Phe | Glu | Asn | Trp |
| | | | | 35 | | | | 40 | | | | 45 | | | |
| Leu | Thr | Gln | Val | Asn | Gly | Val | Leu | Pro | Asp | Trp | Asn | Met | Ser | Glu | Glu |
| | | | | 50 | | | | 55 | | | | 60 | | | |
| Glu | Lys | Leu | Lys | Arg | Leu | Met | Lys | Thr | Leu | Arg | Gly | Pro | Ala | Arg | Glu |
| | | | | 65 | | | 70 | | | 75 | | 80 | | | |
| Val | Met | Arg | Val | Leu | Gln | Ala | Thr | Asn | Pro | Asn | Leu | Ser | Val | Ala | Asp |
| | | | | 85 | | | | 90 | | | | 95 | | | |
| Phe | Leu | Arg | Ala | Met | Lys | Leu | Val | Phe | Gly | Glu | Ser | Glu | Ser | Ser | Val |
| | | | | 100 | | | | 105 | | | | 110 | | | |
| Thr | Ala | His | Gly | Lys | Phe | Phe | Asn | Thr | Leu | Gln | Ala | Gln | Gly | Glu | Lys |
| | | | | | 115 | | | 120 | | | 125 | | | | |
| Ala | Ser | Leu | Tyr | Val | Ile | Arg | Leu | Glu | Val | Gln | Leu | Gln | Asn | Ala | Ile |
| | | | | 130 | | | 135 | | | 140 | | | | | |
| Gln | Ala | Gly | Ile | Ile | Ala | Glu | Lys | Asp | Ala | Asn | Arg | Thr | Arg | Leu | Gln |
| | | | | 145 | | | 150 | | | 155 | | | 160 | | |
| Gln | Leu | Leu | Leu | Gly | Gly | Glu | Leu | Ser | Arg | Asp | Leu | Arg | Leu | Arg | Leu |
| | | | | 165 | | | 170 | | | 175 | | | | | |
| Lys | Asp | Phe | Leu | Arg | Met | Tyr | Ala | Asn | Glu | Gln | Glu | Arg | Leu | Pro | Asn |
| | | | | 180 | | | 185 | | | 190 | | | | | |
| Phe | Leu | Glu | Leu | Ile | Lys | Met | Val | Arg | Glu | Glu | Glu | Asp | Trp | Asp | Asp |
| | | | | 195 | | | 200 | | | 205 | | | | | |
| Ala | Phe | Ile | Lys | Arg | Lys | Arg | Pro | Lys | Arg | Ser | Glu | Ser | Met | Val | Glu |
| | | | | 210 | | | 215 | | | 220 | | | | | |
| Arg | Ala | Val | Ser | Pro | Val | Ala | Phe | Gln | Gly | Ser | Pro | Pro | Ile | Val | Ile |
| | | | | | 225 | | | 230 | | | 235 | | 240 | | |
| Gly | Ser | Ala | Asp | Cys | Asn | Val | Ile | Glu | Ile | Asp | Asp | Thr | Leu | Asp | Asp |
| | | | | | 245 | | | 250 | | | 255 | | | | |
| Ser | Asp | Glu | Asp | Val | Ile | Leu | Val | Glu | Ser | Gln | Asp | Pro | Pro | Leu | Pro |
| | | | | | 260 | | | 265 | | | 270 | | | | |
| Ser | Trp | Gly | Ala | Pro | Pro | Leu | Arg | Asp | Arg | Ala | Arg | Pro | Gln | Asp | Glu |
| | | | | | 275 | | | 280 | | | 285 | | | | |
| Val | Leu | Val | Ile | Asp | Ser | Pro | His | Asn | Ser | Arg | Ala | Gln | Phe | Pro | Ser |
| | | | | 290 | | | 295 | | | 300 | | | | | |
| Thr | Ser | Gly | Gly | Ser | Gly | Tyr | Lys | Asn | Asn | Gly | Pro | Gly | Glu | Met | Arg |
| | | | | | 305 | | | 310 | | | 315 | | 320 | | |
| Arg | Ala | Arg | Lys | Arg | Lys | His | Thr | Ile | Arg | Cys | Ser | Tyr | Cys | Gly | Glu |
| | | | | | 325 | | | 330 | | | 335 | | | | |
| Glu | | | | | 337 | | | | | | | | | | |

<210> 1209
<211> 64
<212>Amino acid
<213> Homo sapiens

<400> 1209
Ser Val Ala Cys Thr Val Pro Leu Arg Ser Met Ser Asp Pro Asp Gln
1 5 10 15
Asp Phe Asp Lys Glu Pro Asp Ser Asp Ser Thr Lys His Ser Thr Pro
20 25 30
Ser Asn Ser Ser Asn Pro Ser Gly Pro Pro Ser Pro Asn Ser Pro His
35 40 45
Arg Ser Gln Leu Pro Leu Glu Gly Leu Glu Gln Pro Ala Cys Asp Thr
50 55 60 64

<210> 1210
<211> 316
<212>Amino acid
<213> Homo sapiens

<400> 1210
Tyr Ser Ala Val Glu Phe Ala Glu Arg Gly Ser Gly Gly Ser Ser Gly
1 5 10 15
Asp Glu Leu Arg Glu Asp Asp Glu Pro Val Lys Lys Arg Gly Arg Lys
20 25 30
Gly Arg Gly Arg Gly Pro Pro Ser Ser Asp Ser Glu Pro Glu Ala
35 40 45
Glu Leu Glu Arg Glu Ala Lys Lys Ser Ala Lys Lys Pro Gln Ser Ser
50 55 60
Ser Thr Glu Pro Ala Arg Lys Pro Gly Gln Lys Glu Lys Arg Val Arg
65 70 75 80
Pro Glu Glu Lys Gln Gln Ala Lys Pro Val Lys Val Glu Arg Thr Arg
85 90 95
Lys Arg Ser Glu Gly Phe Ser Met Asp Arg Lys Val Glu Lys Lys Lys
100 105 110
Glu Pro Ser Val Glu Glu Lys Leu Gln Lys Leu His Ser Glu Ile Lys
115 120 125
Phe Ala Leu Lys Val Asp Ser Pro Asp Val Lys Arg Cys Leu Asn Ala
130 135 140
Leu Glu Glu Leu Gly Thr Leu Gln Val Thr Ser Gln Ile Leu Gln Lys
145 150 155 160
Asn Thr Asp Val Val Ala Thr Leu Lys Lys Ile Arg Arg Tyr Lys Ala
165 170 175
Asn Lys Asp Val Met Glu Lys Ala Ala Glu Val Tyr Thr Arg Leu Lys
180 185 190
Ser Arg Val Leu Gly Pro Lys Ile Glu Ala Val Gln Lys Val Asn Lys
195 200 205
Ala Gly Met Glu Lys Glu Lys Ala Glu Glu Lys Leu Ala Gly Glu Glu
210 215 220
Leu Ala Gly Glu Glu Ala Pro Gln Glu Lys Ala Glu Asp Lys Pro Ser
225 230 235 240
Thr Asp Leu Ser Ala Pro Val Asn Gly Glu Ala Thr Ser Gln Lys Gly

| | | | | |
|---|--|-----|--|---------|
| 245 | | 250 | | 255 |
| Glu Ser Ala Glu Asp Lys Glu His Glu Glu Gly Arg Asp Ser Glu Glu | | | | |
| 260 | | 265 | | 270 |
| Gly Pro Arg Cys Gly Ser Ser Glu Asp Leu His Asp Ser Val Arg Glu | | | | |
| 275 | | 280 | | 285 |
| Gly Pro Asp Leu Asp Arg Pro Gly Ser Asp Arg Gln Glu Arg Glu Arg | | | | |
| 290 | | 295 | | 300 |
| Ala Arg Gly Asp Ser Glu Ala Leu Asp Glu Glu Ser | | | | |
| 305 | | 310 | | 315 316 |

<210> 1211
<211> 767
<212>Amino acid
<213> Homo sapiens

| | | | | |
|---|-----|-----|-----|--|
| <400> 1211 | | | | |
| Leu Ala Glu Leu Ser Ser Leu Ser Val Leu Arg Leu Ser His Asn Ser | | | | |
| 1 | 5 | 10 | 15 | |
| Ile Ser His Ile Ala Glu Gly Ala Phe Lys Gly Leu Arg Ser Leu Arg | | | | |
| 20 | 25 | 30 | | |
| Val Leu Asp Leu Asp His Asn Glu Ile Ser Gly Thr Ile Glu Asp Thr | | | | |
| 35 | 40 | 45 | | |
| Ser Gly Ala Phe Ser Gly Leu Asp Ser Leu Ser Lys Leu Thr Leu Phe | | | | |
| 50 | 55 | 60 | | |
| Gly Asn Lys Ile Lys Ser Val Ala Lys Arg Ala Phe Ser Gly Leu Glu | | | | |
| 65 | 70 | 75 | 80 | |
| Gly Leu Glu His Leu Asn Leu Gly Gly Asn Ala Ile Arg Ser Val Gln | | | | |
| 85 | 90 | 95 | | |
| Phe Asp Ala Phe Val Lys Met Lys Asn Leu Lys Glu Leu His Ile Ser | | | | |
| 100 | 105 | 110 | | |
| Ser Asp Ser Phe Leu Cys Asp Cys Gln Leu Lys Trp Leu Pro Pro Trp | | | | |
| 115 | 120 | 125 | | |
| Leu Ile Gly Arg Met Leu Gln Ala Phe Val Thr Ala Thr Cys Ala His | | | | |
| 130 | 135 | 140 | | |
| Pro Glu Ser Leu Lys Gly Gln Ser Ile Phe Ser Val Pro Pro Glu Ser | | | | |
| 145 | 150 | 155 | 160 | |
| Phe Val Cys Asp Asp Phe Leu Lys Pro Gln Ile Ile Thr Gln Pro Glu | | | | |
| 165 | 170 | 175 | | |
| Thr Thr Met Ala Met Val Gly Lys Asp Ile Arg Phe Thr Cys Ser Ala | | | | |
| 180 | 185 | 190 | | |
| Ala Ser Ser Ser Ser Pro Met Thr Phe Ala Trp Lys Lys Asp Asn | | | | |
| 195 | 200 | 205 | | |
| Glu Val Leu Thr Asn Ala Asp Met Glu Asn Phe Val His Val His Ala | | | | |
| 210 | 215 | 220 | | |
| Gln Asp Gly Glu Val Met Glu Tyr Thr Ile Leu His Leu Arg Gln | | | | |
| 225 | 230 | 235 | 240 | |
| Val Thr Phe Gly His Glu Gly Arg Tyr Gln Cys Val Ile Thr Asn His | | | | |
| 245 | 250 | 255 | | |
| Phe Gly Ser Thr Tyr Ser His Lys Ala Arg Leu Thr Val Asn Val Leu | | | | |
| 260 | 265 | 270 | | |
| Pro Ser Phe Thr Lys Thr Pro His Asp Ile Thr Ile Arg Thr Thr Thr | | | | |
| 275 | 280 | 285 | | |
| Met Ala Arg Leu Glu Cys Ala Ala Thr Gly His Pro Asn Pro Gln Ile | | | | |
| 290 | 295 | 300 | | |
| Ala Trp Gln Lys Asp Gly Gly Thr Asp Phe Pro Ala Ala Arg Glu Arg | | | | |
| 305 | 310 | 315 | 320 | |
| Arg Met His Val Met Pro Asp Asp Asp Val Phe Phe Ile Thr Asp Val | | | | |
| 325 | 330 | 335 | | |
| Lys Ile Asp Asp Ala Gly Val Tyr Ser Cys Thr Ala Gln Asn Ser Ala | | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gly | Ser | Ile | Ser | Ala | Asn | Ala | Thr | Leu | Thr | Val | Leu | Glu | Thr | Pro | Ser |
| 340 | | | | | | | | | | | | | | | |
| 355 | | | | | | | | 360 | | | | 365 | | | |
| Leu | Val | Val | Pro | Leu | Glu | Asp | Arg | Val | Val | Ser | Val | Gly | Glu | Thr | Val |
| 370 | | | | | | | | 375 | | | | 380 | | | |
| Ala | Leu | Gln | Cys | Lys | Ala | Thr | Gly | Asn | Pro | Pro | Arg | Ile | Thr | Trp | |
| 385 | | | | | | | | | | | | 395 | | | 400 |
| Phe | Lys | Gly | Asp | Arg | Pro | Leu | Ser | Leu | Thr | Glu | Arg | His | His | Leu | Thr |
| | | | | | | | | | | | | 405 | 410 | 415 | |
| Pro | Asp | Asn | Gln | Leu | Leu | Val | Val | Gln | Asn | Val | Val | Ala | Glu | Asp | Ala |
| | | | | | | | | | | | | 420 | 425 | 430 | |
| Gly | Arg | Tyr | Thr | Cys | Glu | Met | Ser | Asn | Thr | Leu | Gly | Thr | Glu | Arg | Ala |
| | | | | | | | | | | | | 425 | 440 | 445 | |
| His | Ser | Gln | Leu | Ser | Val | Leu | Pro | Ala | Ala | Gly | Cys | Arg | Lys | Asp | Gly |
| | | | | | | | | | | | | 450 | 455 | 460 | |
| Thr | Thr | Val | Gly | Ile | Phe | Thr | Ile | Ala | Val | Val | Ser | Ser | Ile | Val | Leu |
| 465 | | | | | | | | | | | | 470 | 475 | 480 | |
| Thr | Ser | Leu | Val | Trp | Val | Cys | Ile | Ile | Tyr | Gln | Thr | Arg | Lys | Lys | Ser |
| | | | | | | | | | | | | 485 | 490 | 495 | |
| Glu | Glu | Tyr | Ser | Val | Thr | Asn | Thr | Asp | Glu | Thr | Val | Val | Pro | Pro | Asp |
| | | | | | | | | | | | | 500 | 505 | 510 | |
| Val | Pro | Ser | Tyr | Leu | Ser | Ser | Gln | Gly | Thr | Leu | Ser | Asp | Arg | Gln | Glu |
| | | | | | | | | | | | | 515 | 520 | 525 | |
| Thr | Val | Val | Arg | Thr | Glu | Gly | Gly | Pro | Gln | Ala | Asn | Gly | His | Ile | Glu |
| | | | | | | | | | | | | 530 | 535 | 540 | |
| Ser | Asn | Gly | Val | Cys | Pro | Arg | Asp | Ala | Ser | His | Phe | Pro | Glu | Pro | Asp |
| | | | | | | | | | | | | 545 | 550 | 555 | 560 |
| Thr | His | Ser | Val | Ala | Cys | Arg | Gln | Pro | Lys | Leu | Cys | Ala | Gly | Ser | Ala |
| | | | | | | | | | | | | 565 | 570 | 575 | |
| Tyr | His | Lys | Lys | Pro | Trp | Lys | Ala | Met | Glu | Lys | Ala | Glu | Gly | Thr | Pro |
| | | | | | | | | | | | | 580 | 585 | 590 | |
| Gly | Pro | His | Lys | Met | Glu | His | Gly | Gly | Arg | Val | Val | Cys | Ser | Asp | Cys |
| | | | | | | | | | | | | 595 | 600 | 605 | |
| Asn | Thr | Glu | Val | Asp | Cys | Tyr | Ser | Arg | Gly | Gln | Ala | Phe | His | Pro | Gln |
| | | | | | | | | | | | | 610 | 615 | 620 | |
| Pro | Val | Ser | Arg | Asp | Ser | Ala | Gln | Pro | Ser | Ala | Pro | Asn | Gly | Pro | Glu |
| | | | | | | | | | | | | 625 | 630 | 635 | 640 |
| Pro | Gly | Gly | Ser | Asp | Gln | Glu | His | Ser | Pro | His | His | Gln | Cys | Ser | Arg |
| | | | | | | | | | | | | 645 | 650 | 655 | |
| Thr | Ala | Ala | Gly | Ser | Cys | Pro | Glu | Cys | Gln | Gly | Ser | Leu | Tyr | Pro | Ser |
| | | | | | | | | | | | | 660 | 665 | 670 | |
| Asn | His | Asp | Arg | Met | Leu | Thr | Ala | Val | Lys | Lys | Pro | Met | Ala | Ser | |
| | | | | | | | | | | | | 675 | 680 | 685 | |
| Leu | Asp | Gly | Lys | Gly | Asp | Ser | Ser | Trp | Thr | Leu | Ala | Arg | Leu | Tyr | His |
| | | | | | | | | | | | | 690 | 695 | 700 | |
| Pro | Asp | Ser | Thr | Glu | Leu | Gln | Pro | Ala | Ser | Ser | Leu | Thr | Ser | Gly | Ser |
| | | | | | | | | | | | | 705 | 710 | 715 | 720 |
| Pro | Glu | Arg | Ala | Glu | Ala | Gln | Tyr | Leu | Leu | Val | Ser | Asn | Gly | His | Leu |
| | | | | | | | | | | | | 725 | 730 | 735 | |
| Pro | Lys | Ala | Cys | Asp | Ala | Ser | Pro | Glu | Ser | Thr | Pro | Leu | Thr | Gly | Gln |
| | | | | | | | | | | | | 740 | 745 | 750 | |
| Leu | Pro | Gly | Lys | Gln | Arg | Val | Pro | Leu | Leu | Leu | Ala | Pro | Lys | Ser | |
| | | | | | | | | | | | | 755 | 760 | 765 | 767 |

<210> 1212
<211> 821
<212>Amino acid
<213> Homo sapiens

<400> 1212
 Ala Ala Ala Gly Ala Ala Arg Arg Val Ser Val Arg Cys Gly Arg Ser
 1 5 10 15
 Gly Pro Gly Pro Gly Arg Gly Ala Ala Gly Leu Ser Pro Ala Asp Ile
 20 25 30
 Ala Leu Ala Ser Glu Gln Gly Ala Ser Cys Ser Val Arg Ala Pro Glu
 35 40 45
 Arg Lys Leu Arg Met Lys Leu Leu Trp Gln Ala Lys Met Ser Ser Ile
 50 55 60
 Gln Asp Trp Gly Glu Glu Val Glu Glu Gly Ala Val Tyr His Val Thr
 65 70 75 80
 Leu Lys Arg Val Gln Ile Gln Gln Ala Ala Asn Lys Gly Ala Arg Trp
 85 90 95
 Leu Gly Val Glu Gly Asp Gln Leu Pro Pro Gly His Thr Val Ser Gln
 100 105 110
 Tyr Glu Thr Cys Lys Ile Arg Thr Ile Lys Ala Gly Thr Leu Glu Lys
 115 120 125
 Leu Val Glu Asn Leu Leu Thr Ala Phe Gly Asp Asn Asp Phe Thr Tyr
 130 135 140
 Ile Ser Ile Phe Leu Ser Thr Tyr Arg Gly Phe Ala Ser Thr Lys Glu
 145 150 155 160
 Val Leu Glu Leu Leu Leu Asp Arg Tyr Gly Asn Leu Thr Ser Pro Asn
 165 170 175
 Cys Glu Glu Asp Gly Ser Gln Ser Ser Ser Glu Ser Lys Met Val Ile
 180 185 190
 Arg Asn Ala Ile Ala Ser Ile Leu Arg Ala Trp Leu Asp Gln Cys Ala
 195 200 205
 Glu Asp Phe Arg Glu Pro Pro His Phe Pro Cys Leu Gln Lys Leu Leu
 210 215 220
 Asp Tyr Leu Thr Arg Met Met Pro Gly Ser Asp Pro Glu Arg Arg Ala
 225 230 235 240
 Gln Asn Leu Leu Glu Gln Phe Gln Lys Gln Glu Val Glu Thr Asp Asn
 245 250 255
 Gly Leu Pro Asn Thr Ile Ser Phe Ser Leu Glu Glu Glu Glu Leu
 260 265 270
 Glu Gly Glu Ser Ala Glu Phe Thr Cys Phe Ser Glu Asp Leu Val
 275 280 285
 Ala Glu Gln Leu Thr Tyr Met Asp Ala Gln Leu Phe Lys Lys Val Val
 290 295 300
 Pro His His Cys Leu Gly Cys Ile Trp Ser Arg Arg Asp Lys Lys Glu
 305 310 315 320
 Asn Lys His Leu Ala Pro Thr Ile Arg Ala Thr Ile Ser Gln Phe Asn
 325 330 335
 Thr Leu Thr Lys Cys Val Val Ser Thr Ile Leu Gly Gly Lys Glu Leu
 340 345 350
 Lys Thr Gln Gln Arg Ala Lys Ile Ile Glu Lys Trp Ile Asn Ile Ala
 355 360 365
 His Glu Cys Arg Leu Leu Lys Asn Phe Ser Ser Leu Arg Ala Ile Val
 370 375 380
 Ser Ala Leu Gln Ser Ser Ile Tyr Arg Leu Lys Lys Thr Trp Ala
 385 390 395 400
 Ala Val Pro Arg Asp Arg Met Leu Met Phe Glu Glu Leu Ser Asp Ile
 405 410 415
 Phe Ser Asp His Asn Asn His Leu Thr Ser Arg Glu Leu Leu Met Lys
 420 425 430
 Glu Gly Thr Ser Lys Phe Ala Asn Leu Asp Ser Ser Val Lys Glu Asn
 435 440 445
 Gln Lys Arg Thr Gln Arg Arg Leu Gln Leu Gln Lys Asp Met Gly Val
 450 455 460
 Met Gln Gly Thr Val Pro Tyr Leu Gly Thr Phe Leu Thr Asp Leu Thr
 465 470 475 480
 Met Leu Asp Thr Ala Leu Gln Asp Tyr Ile Glu Gly Gly Leu Ile Asn
 485 490 495
 Phe Glu Lys Arg Arg Glu Phe Glu Val Ile Ala Gln Ile Lys Leu

| | | |
|---|-----|-----|
| 500 | 505 | 510 |
| Leu Gln Ser Ala Cys Asn Ser Tyr Cys Met Thr Pro Asp Gln Lys Phe | | |
| 515 | 520 | 525 |
| Ile Gln Trp Phe Gln Arg Gln Gln Leu Leu Thr Glu Glu Glu Ser Tyr | | |
| 530 | 535 | 540 |
| Ala Leu Ser Cys Glu Ile Glu Ala Ala Ala Asp Ala Ser Thr Thr Ser | | |
| 545 | 550 | 555 |
| Pro Lys Pro Trp Lys Ser Met Val Lys Arg Leu Asn Leu Leu Phe Leu | | 560 |
| 565 | 570 | 575 |
| Gly Ala Asp Met Ile Thr Ser Pro Thr Pro Thr Lys Glu Gln Pro Lys | | |
| 580 | 585 | 590 |
| Ser Thr Ala Ser Gly Ser Ser Gly Glu Ser Met Asp Ser Val Ser Val | | |
| 595 | 600 | 605 |
| Ser Ser Cys Glu Ser Asn His Ser Glu Ala Glu Glu Gly Tyr Ile Thr | | |
| 610 | 615 | 620 |
| Pro Met Asp Thr Pro Asp Glu Pro Gln Lys Lys Leu Ser Glu Ser Ser | | |
| 625 | 630 | 635 |
| Ser Tyr Cys Ser Ser His Ser Met Asp Thr Asn Phe Leu Gln Gly | | 640 |
| 645 | 650 | 655 |
| Met Ser Ser Leu Ile Asn Pro Leu Ser Ser Pro Pro Ser Cys Asn Asn | | |
| 660 | 665 | 670 |
| Asn Pro Lys Ile His Lys Arg Ser Val Ser Val Thr Ser Ile Thr Ser | | |
| 675 | 680 | 685 |
| Thr Val Leu Pro Pro Val Tyr Asn Gln Gln Asn Glu Asp Thr Cys Ile | | |
| 690 | 695 | 700 |
| Ile Arg Ile Ser Val Glu Asp Asn Asn Gly Asn Met Tyr Lys Ser Ile | | |
| 705 | 710 | 715 |
| Met Leu Thr Ser Gln Asp Lys Thr Pro Ala Val Ile Gln Arg Ala Met | | |
| 725 | 730 | 735 |
| Leu Lys His Asn Leu Asp Ser Asp Pro Ala Glu Glu Tyr Glu Leu Val | | |
| 740 | 745 | 750 |
| Gln Val Ile Ser Glu Asp Lys Glu Leu Val Ile Pro Asp Ser Ala Asn | | |
| 755 | 760 | 765 |
| Val Phe Tyr Ala Met Asn Ser Gln Val Asn Phe Asp Phe Ile Leu Arg | | |
| 770 | 775 | 780 |
| Lys Lys Asn Ser Met Glu Glu Gln Val Lys Leu Arg Ser Arg'Thr Ser | | |
| 785 | 790 | 795 |
| Leu Thr Leu Pro Arg Thr Ala Lys Arg Gly Cys Trp Ser Asn Arg His | | 800 |
| 805 | 810 | 815 |
| Ser Lys Ile Thr Leu | | |
| 820 | 821 | |

<210> 1213
 <211> 289
 <212>Amino acid
 <213> Homo sapiens

| | | | |
|---|----|----|----|
| <400> 1213 | | | |
| Ala Arg Glu Lys Met Asp Ser Cys Ile Glu Ala Phe Gly Thr Thr Lys | | | |
| 1 | 5 | 10 | 15 |
| Gln Lys Arg Ala Leu Asn Thr Arg Arg Met Asn Arg Val Gly Asn Glu | | | |
| 20 | 25 | 30 | |
| Ser Leu Asn Arg Ala Val Ala Lys Ala Ala Glu Thr Ile Asp Thr | | | |
| 35 | 40 | 45 | |
| Lys Gly Val Thr Ala Leu Val Ser Asp Ala Ile His Asn Asp Leu Gln | | | |
| 50 | 55 | 60 | |
| Asp Asp Ser Leu Tyr Leu Pro Pro Cys Tyr Asp Asp Ala Ala Lys Pro | | | |
| 65 | 70 | 75 | 80 |
| Glu Asp Val Tyr Lys Phe Glu Asp Leu Leu Ser Pro Ala Glu Tyr Glu | | | |

| | | | |
|---|-----|-----|-----|
| | 85 | 90 | 95 |
| Ala Leu Gln Ser Pro Ser Glu Ala Phe Arg Asn Val Thr Ser Glu Glu | | | |
| 100 | 105 | 110 | |
| Ile Leu Lys Met Ile Glu Glu Asn Ser His Cys Thr Phe Val Ile Glu | | | |
| 115 | 120 | 125 | |
| Ala Leu Lys Ser Leu Pro Ser Asp Val Glu Ser Arg Asp Arg Gln Ala | | | |
| 130 | 135 | 140 | |
| Arg Cys Ile Trp Phe Leu Asp Thr Leu Ile Lys Phe Arg Ala His Arg | | | |
| 145 | 150 | 155 | 160 |
| Val Val Lys Arg Lys Ser Ala Leu Gly Pro Gly Val Pro His Ile Ile | | | |
| 165 | 170 | 175 | |
| Asn Thr Lys Leu Lys His Phe Thr Cys Leu Thr Tyr Asn Asn Gly | | | |
| 180 | 185 | 190 | |
| Arg Leu Arg Asn Leu Ile Ser Asp Ser Met Lys Ala Lys Ile Thr Ala | | | |
| 195 | 200 | 205 | |
| Tyr Val Ile Ile Leu Ala Leu His Ile His Asp Phe Gln Ile Asp Leu | | | |
| 210 | 215 | 220 | |
| Thr Val Leu Gln Arg Asp Leu Lys Leu Ser Glu Lys Arg Met Met Glu | | | |
| 225 | 230 | 235 | 240 |
| Ile Ala Lys Ala Met Arg Leu Lys Ile Ser Lys Arg Arg Val Ser Val | | | |
| 245 | 250 | 255 | |
| Ala Ala Gly Ser Glu Glu Asp His Lys Leu Gly Thr Leu Ser Leu Pro | | | |
| 260 | 265 | 270 | |
| Leu Pro Pro Ala Gln Thr Ser Asp Arg Leu Ala Lys Arg Arg Lys Ile | | | |
| 275 | 280 | 285 | |
| Thr | | | |
| 289 | | | |

<210> 1214
 <211> 873
 <212>Amino acid
 <213> Homo sapiens

| | | | |
|---|------------|-----|-----|
| | <400> 1214 | | |
| Leu Ser Leu Phe Gly Ser Arg Ala Leu Gly Arg Ser Gly Ala Arg Ala | | | |
| 1 | 5 | 10 | 15 |
| Met Ala Lys Ala Lys Lys Val Gly Ala Arg Arg Lys Ala Ser Gly Ala | | | |
| 20 | 25 | 30 | |
| Pro Ala Gly Ala Arg Gly Gly Pro Ala Lys Ala Asn Ser Asn Pro Phe | | | |
| 35 | 40 | 45 | |
| Glu Val Lys Val Asn Arg Gln Lys Phe Gln Ile Leu Gly Arg Lys Thr | | | |
| 50 | 55 | 60 | |
| Arg His Asp Val Gly Leu Pro Gly Val Ser Arg Ala Arg Ala Leu Arg | | | |
| 65 | 70 | 75 | 80 |
| Lys Arg Thr Gln Thr Leu Leu Lys Glu Tyr Lys Glu Arg Asp Lys Ser | | | |
| 85 | 90 | 95 | |
| Asn Val Phe Arg Asp Lys Arg Phe Gly Glu Tyr Asn Ser Asn Met Ser | | | |
| 100 | 105 | 110 | |
| Pro Glu Glu Lys Met Met Lys Arg Phe Ala Leu Glu Gln Gln Arg His | | | |
| 115 | 120 | 125 | |
| His Glu Lys Lys Ser Ile Tyr Asn Leu Asn Glu Asp Glu Glu Leu Thr | | | |
| 130 | 135 | 140 | |
| His Tyr Gly Gln Ser Leu Ala Asp Ile Glu Lys His Asn Asp Ile Val | | | |
| 145 | 150 | 155 | 160 |
| Asp Ser Asp Ser Asp Ala Glu Asp Arg Gly Thr Leu Ser Gly Glu Leu | | | |
| 165 | 170 | 175 | |
| Thr Ala Ala His Phe Gly Gly Gly Leu Leu His Lys Lys Thr | | | |
| 180 | 185 | 190 | |
| Gln Gln Glu Gly Glu Glu Arg Glu Lys Pro Lys Ser Arg Lys Glu Leu | | | |

| | | |
|---|-----|-----|
| 195 | 200 | 205 |
| Ile Glu Glu Leu Ile Ala Lys Ser Lys Gln Glu Lys Arg Glu Arg Gln | | |
| 210 | 215 | 220 |
| Ala Gln Arg Glu Asp Ala Leu Glu Leu Thr Glu Lys Leu Asp Gln Asp | | |
| 225 | 230 | 235 |
| Trp Lys Glu Ile Gln Thr Leu Leu Ser His Lys Thr Pro Lys Ser Glu | | |
| 245 | 250 | 255 |
| Asn Arg Asp Lys Lys Glu Lys Pro Lys Pro Asp Ala Tyr Asp Met Met | | |
| 260 | 265 | 270 |
| Val Arg Glu Leu Gly Phe Glu Met Lys Ala Gln Pro Ser Asn Arg Met | | |
| 275 | 280 | 285 |
| Lys Thr Glu Ala Glu Leu Ala Lys Glu Glu Gln Glu His Leu Arg Lys | | |
| 290 | 295 | 300 |
| Leu Glu Ala Glu Arg Leu Arg Arg Met Leu Gly Lys Asp Glu Asp Glu | | |
| 305 | 310 | 315 |
| Asn Val Lys Lys Pro Lys His Met Ser Ala Asp Asp Asp Leu Asn Asp Gly | | |
| 325 | 330 | 335 |
| Phe Val Leu Asp Lys Asp Asp Arg Arg Leu Leu Ser Tyr Lys Asp Gly | | |
| 340 | 345 | 350 |
| Lys Met Asn Val Glu Glu Asp Val Gln Glu Glu Gln Ser Lys Glu Ala | | |
| 355 | 360 | 365 |
| Ser Asp Pro Glu Ser Asn Glu Glu Glu Gly Asp Ser Ser Gly Gly Glu | | |
| 370 | 375 | 380 |
| Asp Thr Glu Glu Ser Asp Ser Pro Asp Ser His Leu Asp Leu Glu Ser | | |
| 385 | 390 | 395 |
| Asn Val Glu Ser Glu Glu Asn Glu Lys Pro Ala Lys Glu Gln Arg | | |
| 405 | 410 | 415 |
| Gln Thr Pro Gly Lys Gly Leu Ile Ser Gly Lys Glu Arg Ala Gly Lys | | |
| 420 | 425 | 430 |
| Ala Thr Arg Asp Glu Leu Pro Tyr Thr Phe Ala Ala Pro Glu Ser Tyr | | |
| 435 | 440 | 445 |
| Glu Glu Leu Arg Ser Leu Leu Leu Gly Arg Ser Met Glu Glu Gln Leu | | |
| 450 | 455 | 460 |
| Leu Val Val Glu Arg Ile Gln Lys Cys Asn His Pro Ser Leu Ala Glu | | |
| 465 | 470 | 475 |
| Gly Asn Lys Ala Lys Leu Glu Lys Leu Phe Gly Phe Leu Leu Glu Tyr | | |
| 485 | 490 | 495 |
| Val Gly Asp Leu Ala Thr Asp Asp Pro Pro Asp Leu Thr Val Ile Asp | | |
| 500 | 505 | 510 |
| Lys Leu Val Val His Leu Tyr His Leu Cys Gln Met Phe Pro Glu Ser | | |
| 515 | 520 | 525 |
| Ala Ser Asp Ala Ile Lys Phe Val Leu Arg Asp Ala Met His Glu Met | | |
| 530 | 535 | 540 |
| Glu Glu Met Ile Glu Thr Lys Gly Arg Ala Ala Leu Pro Gly Leu Asp | | |
| 545 | 550 | 555 |
| Val Leu Ile Tyr Leu Lys Ile Thr Gly Leu Leu Phe Pro Thr Ser Asp | | |
| 565 | 570 | 575 |
| Phe Trp His Pro Val Val Thr Pro Ala Leu Val Cys Leu Ser Gln Leu | | |
| 580 | 585 | 590 |
| Leu Thr Lys Cys Pro Ile Leu Ser Leu Gln Asp Val Val Lys Gly Leu | | |
| 595 | 600 | 605 |
| Phe Val Cys Cys Leu Phe Leu Glu Tyr Val Ala Leu Ser Gln Arg Phe | | |
| 610 | 615 | 620 |
| Ile Pro Glu Leu Ile Asn Phe Leu Leu Gly Ile Leu Tyr Ile Ala Thr | | |
| 625 | 630 | 635 |
| Pro Asn Lys Ala Ser Gln Gly Ser Thr Leu Val His Pro Phe Arg Ala | | |
| 645 | 650 | 655 |
| Leu Gly Lys Asn Ser Glu Leu Leu Val Val Ser Ala Arg Glu Asp Val | | |
| 660 | 665 | 670 |
| Ala Thr Trp Gln Gln Ser Ser Leu Ser Leu Arg Trp Ala Ser Arg Leu | | |
| 675 | 680 | 685 |
| Arg Ala Pro Thr Ser Thr Glu Ala Asn His Ile Arg Leu Ser Cys Leu | | |
| 690 | 695 | 700 |
| Ala Val Gly Leu Ala Leu Leu Lys Arg Cys Val Leu Met Tyr Gly Ser | | |

| | | | |
|---|-----|-----|-----|
| 705 | 710 | 715 | 720 |
| Leu Pro Ser Phe His Ala Ile Met Gly Pro Leu Arg Ala Leu Leu Thr | | | |
| 725 | 730 | 735 | |
| Asp His Leu Ala Asp Cys Ser His Pro Gln Glu Leu Gln Glu Leu Cys | | | |
| 740 | 745 | 750 | |
| Gln Ser Thr Leu Thr Glu Met Glu Ser Gln Lys Gln Leu Cys Arg Pro | | | |
| 755 | 760 | 765 | |
| Leu Thr Cys Glu Lys Ser Lys Pro Val Pro Leu Lys Leu Phe Thr Pro | | | |
| 770 | 775 | 780 | |
| Arg Leu Val Lys Val Leu Glu Phe Gly Arg Lys Gln Gly Ser Ser Lys | | | |
| 785 | 790 | 795 | 800 |
| Glu Glu Gln Glu Arg Lys Arg Leu Ile His His Lys Arg Glu Phe | | | |
| 805 | 810 | 815 | |
| Lys Gly Ala Val Arg Glu Ile Arg Lys Asp Asn Gln Phe Leu Ala Arg | | | |
| 820 | 825 | 830 | |
| Met Gln Leu Ser Glu Ile Met Glu Arg Asp Ala Glu Arg Lys Arg Lys | | | |
| 835 | 840 | 845 | |
| Val Lys Gln Leu Phe Asn Ser Leu Ala Thr Gln Glu Gly Glu Trp Lys | | | |
| 850 | 855 | 860 | |
| Ala Leu Lys Arg Lys Lys Phe Lys Lys | | | |
| 865 | 870 | 873 | |

<210> 1215
 <211> 319
 <212>Amino acid
 <213> Homo sapiens

| | | | |
|---|-----|-----|-----|
| <400> 1215 | | | |
| Leu Thr Lys Gln Glu Asp Cys Cys Gly Ser Ile Gly Thr Ala Trp Gly | | | |
| 1 | 5 | 10 | 15 |
| Gln Ser Lys Cys His Lys Cys Pro Gln Leu Gln Tyr Thr Gly Val Gln | | | |
| 20 | 25 | 30 | |
| Lys Pro Gly Pro Val Arg Gly Glu Val Gly Ala Asp Cys Pro Gln Gly | | | |
| 35 | 40 | 45 | |
| Tyr Lys Arg Leu Asn Ser Thr His Cys Gln Asp Ile Asn Glu Cys Ala | | | |
| 50 | 55 | 60 | |
| Met Pro Gly Val Cys Arg His Gly Asp Cys Leu Asn Asn Pro Gly Ser | | | |
| 65 | 70 | 75 | 80 |
| Tyr Arg Cys Val Cys Pro Pro Gly His Ser Leu Gly Pro Ser Arg Thr | | | |
| 85 | 90 | 95 | |
| Gln Cys Ile Ala Asp Lys Pro Glu Glu Lys Ser Leu Cys Phe Arg Leu | | | |
| 100 | 105 | 110 | |
| Val Ser Pro Glu His Gln Cys Gln His Pro Leu Thr Thr Arg Leu Thr | | | |
| 115 | 120 | 125 | |
| Arg Gln Leu Cys Cys Cys Ser Val Gly Lys Ala Trp Gly Ala Arg Cys | | | |
| 130 | 135 | 140 | |
| Gln Arg Cys Pro Thr Asp Gly Thr Ala Ala Phe Lys Glu Ile Cys Pro | | | |
| 145 | 150 | 155 | 160 |
| Ala Gly Lys Gly Tyr His Ile Leu Thr Ser His Gln Thr Leu Thr Ile | | | |
| 165 | 170 | 175 | |
| Gln Gly Glu Ser Asp Phe Ser Leu Phe Leu His Pro Asp Gly Pro Pro | | | |
| 180 | 185 | 190 | |
| Lys Pro Gln Gln Leu Pro Glu Ser Pro Ser Gln Ala Pro Pro Pro Glu | | | |
| 195 | 200 | 205 | |
| Asp Thr Glu Glu Glu Arg Gly Val Thr Thr Asp Ser Pro Val Ser Glu | | | |
| 210 | 215 | 220 | |
| Glu Arg Ser Val Gln Gln Ser His Pro Thr Ala Thr Thr Pro Ala | | | |
| 225 | 230 | 235 | 240 |
| Arg Pro Tyr Pro Glu Leu Ile Ser Arg Pro Ser Pro Pro Thr Met Arg | | | |

| | | |
|---|-----|---------|
| 245 | 250 | 255 |
| Trp Phe Leu Pro Asp Leu Pro Pro Ser Arg Ser Ala Val Glu Ile Ala | | |
| 260 | 265 | 270 |
| Pro Thr Gln Val Thr Glu Thr Asp Glu Cys Arg Leu Asn Gln Asn Ile | | |
| 275 | 280 | 285 |
| Cys Gly His Gly Glu Cys Val Pro Gly Pro Pro Asp Tyr Ser Cys His | | |
| 290 | 295 | 300 |
| Cys Asn Pro Gly Tyr Arg Ser His Pro Gln His Arg Tyr Cys Val | | |
| 305 | 310 | 315 319 |

<210> 1216
<211> 815
<212>Amino acid
<213> Homo sapiens

| | | |
|---|------|---------|
| <400> 1216 | 1216 | |
| Met Ala Gly Gly His Cys Gly Ser Phe Pro Ala Ala Ala Ala Gly Ser | | |
| 1 | 5 | 10 15 |
| Gly Glu Ile Val Gln Leu Asn Val Gly Gly Thr Arg Phe Ser Thr Ser | | |
| 20 | 25 | 30 |
| Arg Gln Thr Leu Met Trp Ile Pro Asp Ser Phe Phe Ser Ser Leu Leu | | |
| 35 | 40 | 45 |
| Ser Gly Arg Ile Ser Thr Leu Arg Asp Glu Thr Gly Ala Ile Phe Ile | | |
| 50 | 55 | 60 |
| Asp Arg Asp Pro Ala Ala Phe Ala Pro Ile Leu Asn Phe Leu Arg Thr | | |
| 65 | 70 | 75 80 |
| Lys Glu Leu Asp Leu Arg Gly Val Ser Ile Asn Val Leu Arg His Glu | | |
| 85 | 90 | 95 |
| Ala Glu Phe Tyr Gly Ile Thr Pro Leu Val Arg Arg Leu Leu Leu Cys | | |
| 100 | 105 | 110 |
| Glu Glu Leu Glu Arg Ser Ser Cys Gly Ser Val Leu Phe His Gly Tyr | | |
| 115 | 120 | 125 |
| Leu Pro Pro Pro Gly Ile Pro Ser Arg Lys Ile Asn Asn Thr Val Arg | | |
| 130 | 135 | 140 |
| Ser Ala Asp Ser Arg Asn Gly Leu Asn Ser Thr Glu Gly Glu Ala Arg | | |
| 145 | 150 | 155 160 |
| Gly Asn Gly Thr Gln Pro Val Leu Ser Gly Thr Gly Glu Glu Thr Val | | |
| 165 | 170 | 175 |
| Arg Leu Gly Phe Pro Val Asp Pro Arg Lys Val Leu Ile Val Ala Gly | | |
| 180 | 185 | 190 |
| His His Asn Trp Ile Val Ala Ala Tyr Ala His Phe Ala Val Trp Tyr | | |
| 195 | 200 | 205 |
| Arg Ile Lys Glu Ser Ser Gly Trp Gln Gln Val Phe Thr Ser Pro Tyr | | |
| 210 | 215 | 220 |
| Leu Asp Trp Thr Ile Glu Arg Val Ala Leu Asn Ala Lys Val Val Gly | | |
| 225 | 230 | 235 240 |
| Gly Pro His Gly Asp Lys Asp Lys Met Val Ala Val Ala Ser Glu Ser | | |
| 245 | 250 | 255 |
| Ser Ile Ile Leu Trp Ser Val Gln Asp Gly Gly Ser Gly Ser Glu Ile | | |
| 260 | 265 | 270 |
| Gly Val Phe Ser Leu Gly Val Pro Val Asp Ala Leu Phe Phe Ile Gly | | |
| 275 | 280 | 285 |
| Asn Gln Leu Val Ala Thr Ser His Thr Gly Lys Val Gly Val Trp Asn | | |
| 290 | 295 | 300 |
| Ala Val Thr Gln His Trp Gln Val Gln Asp Val Val Pro Ile Thr Ser | | |
| 305 | 310 | 315 320 |
| Tyr Asp Thr Ala Gly Ser Phe Leu Leu Leu Gly Cys Asn Asn Gly Ser | | |
| 325 | 330 | 335 |
| Ile Tyr Tyr Ile Asp Met Gln Lys Phe Pro Leu Arg Met Lys Asp Asn | | |

| | | | |
|---|-----|-----|-----|
| | 340 | 345 | 350 |
| Asp Leu Leu Val Thr Glu Leu Tyr His Asp Pro Ser Asn Asp Ala Ile | 355 | 360 | 365 |
| Thr Ala Leu Ser Val Tyr Leu Thr Pro Lys Thr Ser Val Ser Gly Asn | 370 | 375 | 380 |
| Trp Ile Glu Ile Ala Tyr Gly Thr Ser Ser Gly Ala Val Arg Val Ile | 385 | 390 | 395 |
| Val Gln His Pro Glu Thr Val Gly Ser Gly Pro Gln Leu Phe Gln Thr | 400 | 405 | 410 |
| Phe Thr Val His Arg Ser Pro Val Thr Lys Ile Met Leu Ser Glu Lys | 415 | 420 | 425 |
| His Leu Val Ser Val Cys Ala Asp Asn Asn His Val Arg Thr Trp Thr | 430 | 435 | 445 |
| Val Thr Arg Phe Arg Gly Met Ile Ser Thr Gln Pro Gly Ser Thr Pro | 450 | 455 | 460 |
| Leu Ala Ser Phe Lys Ile Leu Ser Leu Glu Glu Ser His Gly | 465 | 470 | 475 |
| Ser Tyr Ser Ser Gly Asn Asp Ile Gly Pro Phe Gly Glu Arg Asp Asp | 480 | 485 | 490 |
| Gln Gln Val Phe Ile Gln Lys Val Val Pro Ile Thr Asn Lys Leu Phe | 495 | 500 | 510 |
| Val Arg Leu Ser Ser Thr Gly Lys Arg Ile Cys Glu Ile Gln Ala Val | 515 | 520 | 525 |
| Asp Cys Thr Thr Ile Ser Ser Phe Thr Gly Arg Glu Cys Glu Gly Ser | 530 | 535 | 540 |
| Ser Arg Met Gly Ser Arg Pro Arg Arg Tyr Leu Phe Thr Gly His Thr | 545 | 550 | 555 |
| Asn Gly Ser Ile Gln Met Trp Asp Leu Thr Thr Ala Met Asp Met Val | 560 | 565 | 575 |
| Asn Lys Ser Glu Asp Lys Asp Val Gly Gly Pro Thr Glu Glu Leu | 580 | 585 | 590 |
| Leu Lys Leu Asp Gln Cys Asp Leu Ser Thr Ser Arg Cys Ala Thr | 595 | 600 | 605 |
| Pro Asn Ile Ser Pro Ala Thr Ser Val Val Gln His Ser His Leu Arg | 610 | 615 | 620 |
| Glu Ser Asn Ser Ser Leu Gln Leu Gln His His Asp Thr Thr His Glu | 625 | 630 | 635 |
| Ala Ala Thr Tyr Gly Ser Met Arg Pro Tyr Arg Glu Ser Pro Leu Leu | 640 | 645 | 650 |
| Ala Arg Ala Arg Arg Thr Glu Ser Phe His Ser Tyr Arg Asp Phe Gln | 655 | 660 | 665 |
| Thr Ile Asn Leu Asn Arg Asn Val Glu Arg Ala Val Pro Glu Asn Gly | 670 | 675 | 680 |
| Asn Leu Gly Pro Ile Gln Ala Glu Val Lys Gly Ala Thr Gly Glu Cys | 685 | 690 | 695 |
| Asn Ile Ser Glu Arg Lys Ser Pro Gly Val Glu Ile Lys Ser Leu Arg | 700 | 705 | 710 |
| Glu Leu Asp Ser Gly Leu Glu Val His Lys Ile Ala Glu Gly Phe Ser | 720 | 725 | 730 |
| Glu Ser Lys Lys Arg Ser Ser Glu Asp Glu Asn Glu Asn Lys Ile Glu | 735 | 740 | 745 |
| Phe Arg Lys Lys Gly Gly Phe Glu Gly Gly Gly Phe Leu Gly Arg Lys | 750 | 755 | 760 |
| Lys Val Pro Tyr Leu Ala Ser Ser Pro Ser Thr Ser Asp Gly Gly Thr | 765 | 770 | 775 |
| Asp Ser Pro Gly Thr Ala Ser Pro Ser Pro Thr Lys Thr Thr Pro Ser | 780 | 785 | 790 |
| Pro Arg His Lys Lys Ser Asp Ser Ser Gly Gln Glu Tyr Ser Leu | 800 | 805 | 810 |
| | | 810 | 815 |

<210> 1217
<211> 459
<212> Amino acid

<213> Homo sapiens

<400> 1217

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Arg | Arg | Pro | Thr | Arg | Pro | Ile | Leu | Thr | Asp | Glu | Leu | Phe | Lys | Arg | Thr |
| 1 | | | | | | 5 | | | | 10 | | | | 15 | |
| Ile | Gln | Leu | Pro | His | Leu | Lys | Thr | Leu | Ile | Leu | Asn | Gly | Asn | Lys | Leu |
| | | | | | | 20 | | | 25 | | | | 30 | | |
| Glu | Thr | Leu | Ser | Leu | Val | Ser | Cys | Phe | Ala | Asn | Asn | Thr | Pro | Leu | Glu |
| | | | | | | 35 | | | 40 | | | 45 | | | |
| His | Leu | Asp | Leu | Ser | Gln | Asn | Leu | Leu | Gln | His | Lys | Asn | Asp | Glu | Asn |
| | | | | | | 50 | | | 55 | | | 60 | | | |
| Cys | Ser | Trp | Pro | Glu | Thr | Val | Val | Asn | Met | Asn | Leu | Ser | Tyr | Asn | Lys |
| | | | | | | 65 | | | 70 | | | 75 | | | 80 |
| Leu | Ser | Asp | Ser | Val | Phe | Arg | Cys | Leu | Pro | Lys | Ser | Ile | Gln | Ile | Leu |
| | | | | | | 85 | | | 90 | | | 95 | | | |
| Asp | Leu | Asn | Asn | Asn | Gln | Ile | Gln | Thr | Val | Pro | Lys | Glu | Thr | Ile | His |
| | | | | | | 100 | | | 105 | | | 110 | | | |
| Leu | Met | Ala | Leu | Arg | Glu | Leu | Asn | Ile | Ala | Phe | Asn | Phe | Leu | Thr | Asp |
| | | | | | | 115 | | | 120 | | | 125 | | | |
| Leu | Pro | Gly | Cys | Ser | His | Phe | Ser | Arg | Leu | Ser | Val | Leu | Asn | Ile | Glu |
| | | | | | | 130 | | | 135 | | | 140 | | | |
| Met | Asn | Phe | Ile | Leu | Ser | Pro | Ser | Leu | Asp | Phe | Val | Gln | Ser | Cys | Gln |
| | | | | | | 145 | | | 150 | | | 155 | | | 160 |
| Glu | Val | Lys | Thr | Leu | Asn | Ala | Gly | Arg | Asn | Pro | Phe | Arg | Cys | Thr | Cys |
| | | | | | | 165 | | | 170 | | | 175 | | | |
| Glu | Leu | Lys | Asn | Phe | Ile | Gln | Leu | Glu | Thr | Tyr | Ser | Glu | Val | Met | Met |
| | | | | | | 180 | | | 185 | | | 190 | | | |
| Val | Gly | Trp | Ser | Asp | Ser | Tyr | Thr | Cys | Glu | Tyr | Pro | Leu | Asn | Ile | Arg |
| | | | | | | 195 | | | 200 | | | 205 | | | |
| Gly | Thr | Arg | Leu | Lys | Asp | Val | His | Leu | His | Glu | Leu | Ser | Cys | Asn | Thr |
| | | | | | | 210 | | | 215 | | | 220 | | | |
| Ala | Ile | Leu | Ile | Val | Thr | Ile | Val | Val | Ile | Met | Leu | Val | Leu | Gly | Leu |
| | | | | | | 225 | | | 230 | | | 235 | | | 240 |
| Ala | Val | Ala | Phe | Cys | Cys | Leu | His | Phe | Asp | Leu | Pro | Trp | Tyr | Leu | Arg |
| | | | | | | 245 | | | 250 | | | 255 | | | |
| Met | Leu | Gly | Gln | Cys | Thr | Gln | Thr | Trp | His | Arg | Val | Arg | Lys | Thr | Thr |
| | | | | | | 260 | | | 265 | | | 270 | | | |
| Gln | Glu | Gln | Leu | Lys | Arg | Asn | Val | Arg | Phe | His | Ala | Phe | Ile | Ser | Tyr |
| | | | | | | 275 | | | 280 | | | 285 | | | |
| Ser | Glu | His | Asp | Ser | Leu | Trp | Val | Lys | Asn | Glu | Leu | Ile | Pro | Asn | Leu |
| | | | | | | 290 | | | 295 | | | 300 | | | |
| Glu | Lys | Glu | Asp | Gly | Ser | Ile | Leu | Ile | Cys | Leu | Tyr | Glu | Ser | Tyr | Phe |
| | | | | | | 305 | | | 310 | | | 315 | | | 320 |
| Asp | Pro | Gly | Lys | Ser | Ile | Ser | Glu | Asn | Ile | Val | Ser | Phe | Ile | Glu | Lys |
| | | | | | | 325 | | | 330 | | | 335 | | | |
| Ser | Tyr | Lys | Ser | Ile | Phe | Val | Leu | Ser | Pro | Asn | Phe | Val | Gln | Asn | Glu |
| | | | | | | 340 | | | 345 | | | 350 | | | |
| Trp | Cys | His | Tyr | Glu | Phe | Tyr | Phe | Ala | His | His | Asn | Leu | Phe | His | Glu |
| | | | | | | 355 | | | 360 | | | 365 | | | |
| Asn | Ser | Asp | His | Ile | Ile | Leu | Ile | Leu | Leu | Glu | Pro | Ile | Pro | Phe | Tyr |
| | | | | | | 370 | | | 375 | | | 380 | | | |
| Cys | Ile | Pro | Thr | Arg | Tyr | His | Lys | Leu | Lys | Ala | Leu | Leu | Glu | Lys | Lys |
| | | | | | | 385 | | | 390 | | | 395 | | | 400 |
| Ala | Tyr | Leu | Glu | Trp | Pro | Lys | Asp | Arg | Arg | Lys | Cys | Gly | Leu | Phe | Trp |
| | | | | | | 405 | | | 410 | | | 415 | | | |
| Ala | Asn | Leu | Arg | Ala | Ala | Ile | Asn | Val | Asn | Val | Leu | Ala | Thr | Arg | Glu |
| | | | | | | 420 | | | 425 | | | 430 | | | |
| Met | Tyr | Glu | Leu | Gln | Thr | Phe | Thr | Glu | Leu | Asn | Glu | Glu | Ser | Arg | Gly |
| | | | | | | 435 | | | 440 | | | 445 | | | |
| Ser | Thr | Ile | Ser | Leu | Met | Arg | Thr | Asp | Cys | Leu | | | | | |

450

455

459

<210> 1218
<211> 366
<212>Amino acid
<213> Homo sapiens

<400> 1218
Pro Thr Arg Pro Pro Thr Arg Pro Pro Thr Arg Pro Leu Leu Thr Pro
1 5 10 15
Ser Trp Thr Ser Thr Gly Arg Met Trp Ser His Leu Asn Arg Leu Leu
20 25 30
Phe Trp Ser Ile Phe Ser Ser Val Thr Cys Arg Lys Ala Val Leu Asp
35 40 45
Cys Glu Ala Met Lys Thr Asn Glu Phe Pro Ser Pro Cys Leu Asp Ser
50 55 60
Lys Thr Lys Val Val Met Lys Gly Gln Asn Val Ser Met Phe Cys Ser
65 70 75 80
His Lys Asn Lys Ser Leu Gln Ile Thr Tyr Ser Leu Phe Arg Arg Lys
85 90 95
Thr His Leu Gly Thr Gln Asp Gly Lys Gly Glu Pro Ala Ile Phe Asn
100 105 110
Leu Ser Ile Thr Glu Ala His Glu Ser Gly Pro Tyr Lys Cys Lys Ala
115 120 125
Gln Val Thr Ser Cys Ser Lys Tyr Ser Arg Asp Phe Ser Phe Thr Ile
130 135 140
Val Asp Pro Val Thr Ser Pro Val Leu Asn Ile Met Val Ile Gln Thr
145 150 155 160
Glu Thr Asp Arg His Ile Thr Leu His Cys Leu Ser Val Asn Gly Ser
165 170 175
Leu Pro Ile Asn Tyr Thr Phe Phe Asn His Val Ala Ile Ser Pro
180 185 190
Ala Ile Ser Lys Tyr Asp Arg Glu Pro Ala Glu Phe Asn Leu Thr Lys
195 200 205
Lys Asn Pro Gly Glu Glu Glu Tyr Arg Cys Glu Ala Lys Asn Arg
210 215 220
Leu Pro Asn Tyr Ala Thr Tyr Ser His Pro Val Thr Met Pro Ser Thr
225 230 235 240
Gly Gly Asp Ser Cys Pro Phe Cys Leu Lys Leu Leu Leu Pro Gly Leu
245 250 255
Leu Leu Leu Val Val Ile Ile Leu Ile Leu Ala Phe Trp Val Leu
260 265 270
Pro Lys Tyr Lys Thr Arg Lys Ala Met Arg Asn Asn Val Pro Arg Asp
275 280 285
Arg Gly Asp Thr Ala Met Glu Val Gly Ile Tyr Ala Asn Ile Leu Glu
290 295 300
Lys Gln Ala Lys Glu Glu Ser Val Pro Glu Val Gly Ser Arg Pro Cys
305 310 315 320
Val Ser Thr Ala Gln Asp Glu Ala Lys His Ser Gln Glu Leu Gln Tyr
325 330 335
Ala Thr Pro Val Phe Gln Glu Val Ala Pro Arg Glu Gln Glu Ala Cys
340 345 350
Asp Ser Tyr Lys Ser Gly Tyr Val Tyr Ser Glu Leu Asn Phe
355 360 365 366

<210> 1219
<211> 97
<212>Amino acid

<213> Homo sapiens

<400> 1219
 Phe Phe Phe Glu Glu Arg Arg Thr Gly Ser His Ser Val Gly His
 1 5 10 15
 Pro Arg Met Glu Tyr Ser Gly Val Ser Met Ala His Cys Ser Leu Asn
 20 25 30
 Leu Leu Gly Ser Ser Asn Ser Pro Ser Ser Ala Ser Gln Asp Ala Arg
 35 40 45
 Thr Thr Gly Ala Cys Gln His Ala Gln Leu Ile Gly Phe Phe Phe
 50 55 60
 Val Glu Thr Ala Ser Pro Gln Val Thr His Ala Gly Leu Lys His Leu
 65 70 75 80
 Val Ser Arg Asn Pro Ser Ala Val Thr Ser Gln Ser Ala Arg Ile Lys
 85 90 95
 Thr
 97

<210> 1220
<211> 242
<212>Amino acid
<213> Homo sapiens

<400> 1220
 Asn Arg Glu Gly Ala Arg Lys Ile Gln Asn Lys Trp Leu Arg Pro Ser
 1 5 10 15
 Pro Arg Ser His Arg Thr Pro Glu Ser Val Ser Pro Glu Arg Tyr Ser
 20 25 30
 Tyr Gly Thr Ser Ser Ser Lys Arg Thr Glu Gly Ser Cys Arg Arg
 35 40 45
 Arg Arg Gln Ser Ser Ser Ala Asn Ser Gln Gln Gly Gln Trp Glu
 50 55 60
 Thr Gly Ser Pro Pro Thr Lys Arg Gln Arg Ser Arg Gly Arg Pro
 65 70 75 80
 Ser Gly Gly Ala Lys Arg Arg Arg Arg Gly Ala Pro Ala Ala Pro Gln
 85 90 95
 Gln Gln Ser Glu Pro Ala Arg Pro Ser Ser Glu Gly Lys Val Thr Cys
 100 105 110
 Asp Ile Arg Leu Arg Val Arg Ala Glu Tyr Cys Glu His Gly Pro Ala
 115 120 125
 Leu Glu Gln Gly Val Ala Ser Arg Arg Pro Gln Ala Leu Ala Arg Gln
 130 135 140
 Leu Asp Val Phe Gly Gln Ala Thr Ala Val Leu Arg Ser Arg Asp Leu
 145 150 155 160
 Gly Ser Val Val Cys Asp Ile Lys Phe Ser Glu Leu Ser Tyr Leu Asp
 165 170 175
 Ala Phe Trp Gly Asp Tyr Leu Ser Gly Ala Leu Leu Gln Ala Leu Arg
 180 185 190
 Gly Val Phe Leu Thr Glu Ala Leu Arg Glu Ala Val Gly Arg Glu Ala
 195 200 205
 Val Arg Leu Leu Val Ser Val Asp Glu Ala Asp Tyr Glu Ala Gly Arg
 210 215 220
 Arg Arg Leu Leu Leu Met Glu Glu Glu Gly Gly Arg Arg Pro Thr Glu
 225 230 235 240
 Ala Ser

242

<210> 1221
<211> 440
<212>Amino acid
<213> Homo sapiens

<400> 1221
Ala Pro Asn Thr Ala Glu Leu Arg Ile Cys Arg Val Asn Lys Asn Cys
1 5 10 15
Gly Ser Val Arg Gly Gly Asp Glu Ile Phe Leu Leu Cys Asp Lys Val
20 25 30
Gln Lys Asp Asp Ile Glu Val Arg Phe Val Leu Asn Asp Trp Glu Ala
35 40 45
Lys Gly Ile Phe Ser Gln Ala Asp Val His Arg Gln Val Ala Ile Val
50 55 60
Phe Lys Thr Pro Pro Tyr Cys Lys Ala Ile Thr Glu Pro Val Thr Val
65 70 75 80
Lys Met Gln Leu Arg Arg Pro Ser Asp Gln Glu Val Ser Glu Ser Met
85 90 95
Asp Phe Arg Tyr Ile Pro Asp Glu Lys Asp Thr Tyr Gly Asn Lys Ala
100 105 110
Lys Lys Lys Thr Thr Leu Leu Phe Gln Lys Leu Cys Gln Asp His
115 120 125
Val Glu Thr Gly Phe Arg His Val Asp Gln Asp Gly Leu Glu Leu Leu
130 135 140
Thr Ser Gly Asp Pro Pro Thr Leu Ala Ser Gln Ser Ala Gly Ile Thr
145 150 155 160
Val Asn Phe Pro Glu Arg Pro Arg Pro Gly Leu Leu Gly Ser Ile Gly
165 170 175
Glu Gly Arg Tyr Phe Lys Lys Glu Pro Asn Leu Phe Ser His Asp Ala
180 185 190
Val Val Arg Glu Met Pro Thr Gly Val Ser Ser Gln Ala Glu Ser Tyr
195 200 205
Tyr Pro Ser Pro Gly Pro Ile Ser Ser Gly Leu Ser His His Ala Ser
210 215 220
Met Ala Pro Leu Pro Ser Ser Ser Trp Ser Ser Val Ala His Pro Thr
225 230 235 240
Pro Arg Ser Gly Asn Thr Asn Pro Leu Ser Ser Phe Ser Thr Arg Thr
245 250 255
Leu Pro Ser Asn Ser Gln Gly Ile Pro Pro Phe Leu Arg Ile Pro Val
260 265 270
Gly Asn Asp Leu Asn Ala Ser Asn Ala Cys Ile Tyr Asn Asn Ala Asp
275 280 285
Asp Ile Val Gly Met Glu Ala Ser Ser Met Pro Ser Ala Asp Leu Tyr
290 295 300
Gly Ile Ser Asp Pro Asn Met Leu Ser Asn Cys Ser Val Asn Met Met
305 310 315 320
Thr Thr Ser Ser Asp Ser Met Gly Glu Thr Asp Asn Pro Arg Leu Leu
325 330 335
Ser Met Asn Leu Glu Asn Pro Ser Cys Asn Ser Val Leu Asp Pro Arg
340 345 350
Asp Leu Arg Gln Leu His Gln Met Ser Ser Ser Met Ser Ala Gly
355 360 365
Ala Asn Ser Asn Thr Thr Val Phe Val Ser Gln Ser Asp Ala Phe Glu
370 375 380
Gly Ser Asp Phe Ser Cys Ala Asp Asn Ser Met Ile Asn Glu Ser Gly
385 390 395 400
Pro Ser Asn Ser Thr Asn Pro Asn Ser His Gly Phe Val Gln Asp Ser

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gln | Tyr | Ser | Gly | Ile | Gly | Ser | Met | Gln | Asn | Glu | Gln | Leu | Ser | Asp | Ser |
| 405 | | | | | | | 410 | | | | | | | 415 | |
| 420 | | | | | | | 425 | | | | | | | 430 | |
| Phe | Pro | Tyr | Glu | Phe | Phe | Gln | Val | | | | | | | | |
| 435 | | | | | | | 440 | | | | | | | | |

<210> 1222
<211> 437
<212>Amino acid
<213> Homo sapiens

| | | | | | | | | | | | | | | | |
|------------|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <400> 1222 | | | | | | | | | | | | | | | |
| Arg | Arg | Leu | Ser | Leu | Leu | Asp | Leu | Gln | Leu | Gly | Pro | Leu | Gly | Arg | Asp |
| 1 | | | | | | | | | 10 | | | | | 15 | |
| Pro | Pro | Gln | Glu | Cys | Ser | Thr | Phe | Ser | Pro | Thr | Asp | Ser | Gly | Glu | Glu |
| | | 20 | | | | | | 25 | | | | | 30 | | |
| Pro | Gly | Gln | Leu | Ser | Pro | Gly | Val | Gln | Phe | Gln | Arg | Arg | Gln | Asn | Gln |
| | 35 | | | | | | 40 | | | | 45 | | | | |
| Arg | Arg | Phe | Ser | Met | Glu | Asp | Val | Ser | Lys | Arg | Leu | Ser | Leu | Pro | Met |
| | 50 | | | | 55 | | | | 60 | | | | | | |
| Asp | Ile | Arg | Leu | Pro | Gln | Phe | Leu | Gln | Lys | Leu | Gln | Met | Glu | Ser | |
| | 65 | | | | 70 | | | 75 | | | | 80 | | | |
| Pro | Asp | Leu | Pro | Lys | Pro | Leu | Ser | Arg | Met | Ser | Arg | Arg | Ala | Ser | Leu |
| | | 85 | | | | | 90 | | | | 95 | | | | |
| Ser | Asp | Ile | Gly | Phe | Gly | Lys | Leu | Glu | Thr | Tyr | Val | Lys | Leu | Asp | Lys |
| | 100 | | | | 105 | | | 110 | | | | | | | |
| Leu | Gly | Gly | Gly | Thr | Tyr | Ala | Thr | Val | Phe | Lys | Gly | Arg | Ser | Lys | Leu |
| | 115 | | | | 120 | | | | 125 | | | | | | |
| Thr | Glu | Asn | Leu | Val | Ala | Leu | Lys | Glu | Ile | Arg | Leu | Glu | His | Glu | |
| | 130 | | | | 135 | | | 140 | | | | | | | |
| Gly | Ala | Pro | Cys | Thr | Ala | Ile | Arg | Glu | Val | Ser | Leu | Leu | Lys | Asn | Leu |
| | 145 | | | | 150 | | | 155 | | | | 160 | | | |
| Lys | His | Ala | Asn | Ile | Val | Thr | Leu | His | Asp | Leu | Ile | His | Thr | Asp | Arg |
| | | 165 | | | | 170 | | 175 | | | | | | | |
| Ser | Leu | Thr | Leu | Val | Phe | Glu | Tyr | Leu | Asp | Ser | Asp | Leu | Lys | Gln | Tyr |
| | 180 | | | | 185 | | | 190 | | | | | | | |
| Leu | Asp | His | Cys | Gly | Asn | Leu | Met | Ser | Met | His | Asn | Val | Lys | Ile | Phe |
| | 195 | | | | 200 | | | 205 | | | | | | | |
| Met | Phe | Gln | Leu | Leu | Arg | Gly | Leu | Ala | Tyr | Cys | His | His | Arg | Lys | Ile |
| | 210 | | | | 215 | | | 220 | | | | | | | |
| Leu | His | Arg | Asp | Leu | Lys | Pro | Gln | Asn | Leu | Ile | Asn | Glu | Arg | Gly | |
| | 225 | | | | 230 | | | 235 | | | | 240 | | | |
| Glu | Leu | Lys | Leu | Ala | Asp | Phe | Gly | Leu | Ala | Arg | Ala | Lys | Ser | Val | Pro |
| | | 245 | | | | 250 | | | 255 | | | | | | |
| Thr | Lys | Thr | Tyr | Ser | Asn | Glu | Val | Val | Thr | Leu | Trp | Tyr | Arg | Pro | Pro |
| | 260 | | | | 265 | | | | 270 | | | | | | |
| Asp | Val | Leu | Leu | Gly | Ser | Thr | Glu | Tyr | Ser | Thr | Pro | Ile | Asp | Met | Trp |
| | 275 | | | | 280 | | | 285 | | | | | | | |
| Gly | Val | Gly | Cys | Ile | His | Tyr | Glu | Met | Ala | Thr | Gly | Arg | Pro | Leu | Phe |
| | 290 | | | | ,295 | | | 300 | | | | | | | |
| Pro | Gly | Ser | Thr | Val | Lys | Glu | Glu | Leu | His | Lys | Ile | Asn | Arg | Leu | |
| | 305 | | | | 310 | | | 315 | | | | 320 | | | |
| Gly | Thr | Pro | Thr | Glu | Glu | Thr | Trp | Pro | Gly | Val | Thr | Ala | Phe | Ser | Glu |
| | | 325 | | | | 330 | | | 335 | | | | | | |
| Phe | Arg | Thr | Tyr | Ser | Phe | Pro | Cys | Tyr | Leu | Pro | Gln | Pro | Leu | Ile | Asn |
| | 340 | | | | | | 345 | | | | 350 | | | | |
| His | Ala | Pro | Arg | Leu | Asp | Thr | Asp | Gly | Ile | His | Leu | Leu | Ser | Ser | Leu |
| | 355 | | | | | | 360 | | | | 365 | | | | |
| Leu | Leu | Tyr | Glu | Ser | Lys | Ser | Arg | Met | Ser | Ala | Glu | Ala | Ala | Ser | |

| | | |
|---|-----|-----|
| 370 | 375 | 380 |
| His Ser Tyr Phe Arg Ser Leu Gly Glu Arg Val His Gln Leu Glu Asp | | |
| 385 | 390 | 395 |
| Thr Ala Ser Ile Phe Ser Leu Lys Glu Ile Gln Leu Gln Lys Asp Pro | | 400 |
| 405 | 410 | 415 |
| Gly Tyr Arg Gly Leu Ala Phe Gln Gln Pro Gly Arg Gly Lys Asn Arg | | |
| 420 | 425 | 430 |
| Arg Gln Ser Ile Phe | | |
| 435 | 437 | |

<210> 1223
<211> 150
<212>Amino acid
<213> Homo sapiens

| | | |
|---|-----|-----|
| <400> 1223 | | |
| Cys Thr Pro His Gly Ser Ser Ser Trp Lys Ile Pro Leu Trp Pro | | |
| 1 | 5 | 10 |
| Arg His Met Ser Pro Leu His Ser Cys Leu Pro Val Gly Thr Ser Thr | | 15 |
| 20 | 25 | 30 |
| Ser Ser Gly Pro Leu Ala Val Pro Arg Asp Cys Phe His Leu Cys Cys | | |
| 35 | 40 | 45 |
| Leu Trp Gly Gln Leu Leu Ile Ser Cys Pro Leu Ala Cys Gly Gln | | |
| 50 | 55 | 60 |
| Gly Cys Arg Val Ala Gly Gly Gln His Val Pro Gly Gln Ala Leu | | |
| 65 | 70 | 75 |
| Gly Thr Leu Ser Pro Leu Val Ser Leu Leu Thr Trp Ala Gly Pro Ser | | 80 |
| 85 | 90 | 95 |
| Leu Asp Trp Pro His Pro Gly Ser Leu Val Thr Pro Arg Cys Pro Ile | | |
| 100 | 105 | 110 |
| Leu Pro Ala Val Pro Val Leu Val Lys Gly Leu Gly Trp Pro Pro | | |
| 115 | 120 | 125 |
| Thr Arg Pro Ser Arg Ala Ala Pro Val Ser Gly Pro Trp Asp Gln Leu | | |
| 130 | 135 | 140 |
| Pro Tyr Phe Pro Gly Leu | | |
| 145 | 150 | |

<210> 1224
<211> 276
<212>Amino acid
<213> Homo sapiens

| | | |
|---|----|----|
| <400> 1224 | | |
| Leu Ile Ser Pro Val Trp Gly Asn Ile Gln Arg Ser Arg Ser Val Pro | | |
| 1 | 5 | 10 |
| Leu Phe Pro Ser Gly Leu Val Leu Gly Gly Ile Trp Ala Arg Gly Pro | | 15 |
| 20 | 25 | 30 |
| Leu Leu Ala Leu Leu Ala Ser Phe Asn Ile Ile Ser Val Leu Asn Ala | | |
| 35 | 40 | 45 |
| Glu Cys Tyr Leu Lys Gln Ile Leu His Pro Thr Ser His Phe Thr Val | | |
| 50 | 55 | 60 |
| Ser Glu Thr Pro Pro Leu Ser Gly Asn Asp Thr Asp Ser Leu Ser Cys | | |
| 65 | 70 | 75 |
| Asp Ser Gly Ser Ser Ala Thr Ser Thr Pro Cys Val Ser Arg Leu Val | | 80 |

| | | |
|---|-----|-----|
| 85 | 90 | 95 |
| Thr Gly His His Leu Trp Ala Ser Lys Asn Gly Arg His Val Leu Gly | | |
| 100 | 105 | 110 |
| Leu Ile Glu Asp Tyr Glu Ala Leu Leu Lys Gln Ile Ser Gln Gly Gln | | |
| 115 | 120 | 125 |
| Arg Leu Leu Ala Glu Met Asp Ile Gln Thr Gln Glu Ala Pro Ser Ser | | |
| 130 | 135 | 140 |
| Thr Ser Gln Glu Leu Gly Thr Lys Gly Pro His Pro Ala Pro Leu Ser | | |
| 145 | 150 | 155 |
| Lys Phe Val Ser Ser Val Ser Thr Ala Lys Leu Thr Leu Glu Glu Ala | | |
| 165 | 170 | 175 |
| Tyr Arg Arg Leu Lys Leu Leu Trp Arg Val Ser Leu Pro Glu Asp Gly | | |
| 180 | 185 | 190 |
| Gln Cys Pro Leu His Cys Glu Gln Ile Gly Glu Met Lys Ala Glu Val | | |
| 195 | 200 | 205 |
| Thr Lys Leu His Lys Lys Leu Phe Glu Gln Glu Lys Lys Leu Gln Asn | | |
| 210 | 215 | 220 |
| Thr Met Lys Leu Leu Gln Leu Ser Lys Arg Gln Glu Lys Val Ile Phe | | |
| 225 | 230 | 235 |
| Asp Gln Leu Val Val Thr His Lys Ile Leu Arg Lys Ala Arg Gly Asn | | |
| 245 | 250 | 255 |
| Leu Glu Leu Arg Pro Gly Gly Ala His Pro Gly Thr Cys Ser Pro Ser | | |
| 260 | 265 | 270 |
| Arg Pro Gly Ser | | |
| 275 | 276 | |

<210> 1225
 <211> 270
 <212>Amino acid
 <213> Homo sapiens

| | | |
|---|-----|-----|
| <400> 1225 | | |
| Leu Gly Leu Phe Cys Ile Leu Pro Ile Asp Thr Leu Cys Ala Val Leu | | |
| 1 | 5 | 10 |
| Glu Arg Asp Thr Leu Ser Ile Arg Glu Ser Arg Leu Phe Gly Ala Val | | |
| 20 | 25 | 30 |
| Val Arg Trp Ala Glu Ala Glu Cys Gln Arg Gln Gln Leu Pro Val Thr | | |
| 35 | 40 | 45 |
| Phe Gly Asn Lys Gln Lys Val Leu Gly Lys Ala Leu Ser Leu Ile Arg | | |
| 50 | 55 | 60 |
| Phe Pro Leu Met Thr Ile Glu Glu Phe Ala Ala Gly Pro Ala Gln Ser | | |
| 65 | 70 | 75 |
| Gly Ile Leu Ser Asp Arg Glu Val Val Asn Leu Phe Leu His Phe Thr | | |
| 85 | 90 | 95 |
| Val Asn Pro Lys Pro Arg Val Glu Tyr Ile Asp Arg Pro Arg Cys Cys | | |
| 100 | 105 | 110 |
| Leu Arg Gly Lys Glu Cys Cys Ile Asn Arg Phe Gln Gln Val Glu Ser | | |
| 115 | 120 | 125 |
| Arg Trp Gly Tyr Ser Gly Thr Ser Asp Arg Ile Arg Phe Thr Val Asn | | |
| 130 | 135 | 140 |
| Arg Arg Ile Ser Ile Val Gly Phe Gly Leu Tyr Gly Ser Ile His Gly | | |
| 145 | 150 | 155 |
| Pro Thr Asp Tyr Gln Val Asn Ile Gln Ile Ile Glu Tyr Glu Lys Lys | | |
| 165 | 170 | 175 |
| Gln Thr Leu Gly Gln Asn Asp Thr Gly Phe Ser Cys Asp Gly Thr Ala | | |
| 180 | 185 | 190 |
| Asn Thr Phe Arg Val Met Phe Lys Glu Pro Ile Glu Ile Leu Pro Asn | | |
| 195 | 200 | 205 |
| Val Cys Tyr Thr Ala Cys Ala Thr Leu Lys Gly Pro Asp Ser His Tyr | | |

| | | |
|---|-----|-----|
| 210 | 215 | 220 |
| Gly Thr Lys Gly Leu Lys Lys Val Val His Glu Thr Pro Ala Ala Ser | | |
| 225 | 230 | 235 |
| Lys Thr Val Phe Phe Phe Ser Ser Pro Gly Asn Asn Asn Gly Thr | | 240 |
| 245 | 250 | 255 |
| Ser Ile Glu Asp Gly Gln Ile Pro Glu Ile Ile Phe Tyr Thr | | |
| 260 | 265 | 270 |

<210> 1226
<211> 273
<212>Amino acid
<213> Homo sapiens

| | | |
|---|-----|-----|
| <400> 1226 | | |
| Ser Val Trp Trp Asn Ser Glu Val Lys Asp Trp Met Gln Lys Lys Arg | | |
| 1 | 5 | 10 |
| Arg Gly Leu Arg Asn Ser Arg Ala Thr Ala Gly Asp Ile Ala His Tyr | | 15 |
| 20 | 25 | 30 |
| Tyr Arg Asp Tyr Val Val Lys Lys Gly Leu Gly His Asn Phe Val Ser | | |
| 35 | 40 | 45 |
| Gly Ala Val Val Thr Ala Val Glu Trp Gly Thr Pro Asp Pro Ser Ser | | |
| 50 | 55 | 60 |
| Cys Gly Ala Gln Asp Ser Ser Pro Leu Phe Gln Val Ser Gly Phe Leu | | |
| 65 | 70 | 75 |
| Thr Arg Asn Gln Ala Gln Gln Pro Phe Ser Leu Trp Ala Arg Asn Val | | 80 |
| 85 | 90 | 95 |
| Val Leu Ala Thr Gly Thr Phe Asp Ser Pro Ala Arg Leu Gly Ile Pro | | |
| 100 | 105 | 110 |
| Gly Glu Ala Leu Pro Phe Ile His His Glu Leu Ser Ala Leu Glu Ala | | |
| 115 | 120 | 125 |
| Ala Thr Arg Val Gly Ala Val Thr Pro Ala Ser Asp Pro Val Leu Ile | | |
| 130 | 135 | 140 |
| Ile Gly Ala Gly Leu Ser Ala Ala Asp Ala Val Leu Tyr Ala Arg His | | |
| 145 | 150 | 155 |
| Tyr Asn Ile Pro Val Ile His Ala Phe Arg Arg Ala Val Asp Asp Pro | | 160 |
| 165 | 170 | 175 |
| Gly Leu Val Phe Asn Gln Leu Pro Lys Met Leu Tyr Pro Glu Tyr His | | |
| 180 | 185 | 190 |
| Lys Val His Gln Met Met Arg Glu Gln Ser Ile Leu Ser Pro Ser Pro | | |
| 195 | 200 | 205 |
| Tyr Glu Gly Tyr Arg Ser Leu Pro Arg His Gln Leu Leu Cys Phe Lys | | |
| 210 | 215 | 220 |
| Glu Asp Cys Gln Ala Val Phe Gln Asp Leu Glu Gly Val Glu Lys Val | | |
| 225 | 230 | 235 |
| Phe Gly Val Ser Leu Val Leu Val Ile Gly Ser His Pro Asp Leu | | 240 |
| 245 | 250 | 255 |
| Ser Phe Leu Pro Gly Ala Gly Leu Thr Leu Gln Trp Ile Leu Thr Ser | | |
| 260 | 265 | 270 |
| Arg | | |
| 273 | | |

<210> 1227
<211> 86
<212>Amino acid
<213> Homo sapiens

<400> 1227
 Lys Leu Arg Pro Phe Ile Phe Ser Asn Gln Ser Leu Trp Leu His Ser
 1 5 10 15
 Tyr Glu Gly Ala Glu Leu Glu Lys Thr Phe Ile Lys Gly Ser Trp Ala
 20 25 30
 Thr Phe Trp Val Lys Val Ala Ser Cys Trp Ala Cys Val Leu Leu Tyr
 35 40 45
 Leu Gly Leu Leu Leu Ala Pro Leu Cys Trp Pro Pro Thr Gln Lys Pro
 50 55 60
 Gln Pro Leu Ile Leu Arg Arg Arg Arg His Arg Ile Ile Ser Pro Asp
 65 70 75 80
 Asn Lys Tyr Pro Pro Val
 85 86

<210> 1228
 <211> 249
 <212>Amino acid
 <213> Homo sapiens

<400> 1228
 Gln Leu Ile His Leu Ser His Gly Tyr Gln Ile His Trp Thr Asp Tyr
 1 5 10 15
 Tyr Asn Val Gly Thr Gly Arg Pro Glu Phe Gly Thr Arg Ala Ala His
 20 25 30
 Lys Ser Leu Ala Gly Ala Glu Leu Lys Thr Leu Lys Asp Phe Val Thr
 35 40 45
 Val Leu Ala Lys Leu Phe Pro Gly Arg Pro Pro Val Lys Lys Leu Leu
 50 55 60
 Glu Met Leu Gln Glu Trp Leu Ala Ser Leu Pro Leu Asp Arg Ile Pro
 65 70 75 80
 Tyr Asn Ala Val Leu Asp Leu Val Asn Asn Lys Met Arg Ile Ser Gly
 85 90 95
 Ile Phe Leu Thr Asn His Ile Lys Trp Val Gly Cys Gln Gly Ser Arg
 100 105 110
 Ser Glu Leu Arg Gly Tyr Pro Cys Ser Leu Trp Lys Leu Phe His Thr
 115 120 125
 Leu Thr Val Glu Ala Ser Thr His Pro Asp Ala Leu Val Gly Thr Gly
 130 135 140
 Phe Glu Asp Asp Pro Gln Ala Val Leu Gln Thr Met Arg Arg Tyr Val
 145 150 155 160
 His Thr Phe Phe Gly Cys Lys Glu Cys Gly Glu His Phe Glu Glu Met
 165 170 175
 Ala Lys Glu Ser Met Asp Ser Val Lys Thr Pro Asp Gln Ala Ile Leu
 180 185 190
 Trp Leu Trp Lys Lys His Asn Met Val Asn Gly Arg Leu Ala Gly Glu
 195 200 205
 Lys Pro Leu Gly Met Gly Gly Ser Ala Arg Ala Glu Gly Gly Pro Gly
 210 215 220
 Pro Gly Thr Ala Arg Thr Ala Arg Leu Pro Trp Gly Leu Ser Leu Ser
 225 230 235 240
 Phe Ala Ala Ser Cys His Pro Leu Cys
 245 249

<210> 1229
 <211> 800
 <212>Amino acid

<213> Homo sapiens

<400> 1229

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| His | Gly | Gly | Ala | Thr | Phe | Ile | Asn | Ala | Phe | Val | Thr | Thr | Pro | Met | Cys |
| 1 | | | | | 5 | | | | | 10 | | | | | 15 |
| Cys | Pro | Ser | Arg | Ser | Ser | Met | Leu | Thr | Gly | Lys | Tyr | Val | His | Asn | His |
| | | | | | 20 | | | | 25 | | | | | 30 | |
| Asn | Val | Tyr | Thr | Asn | Asn | Glu | Asn | Cys | Ser | Ser | Pro | Ser | Trp | Gln | Ala |
| | | | | | 35 | | | | 40 | | | | 45 | | |
| Met | His | Glu | Pro | Arg | Thr | Phe | Ala | Val | Tyr | Leu | Asn | Asn | Thr | Gly | Tyr |
| | | | | | 50 | | | | 55 | | | | 60 | | |
| Arg | Thr | Ala | Phe | Phe | Gly | Lys | Tyr | Leu | Asn | Glu | Tyr | Asn | Gly | Ser | Tyr |
| | | | | | 65 | | | 70 | | 75 | | | | 80 | |
| Ile | Pro | Pro | Gly | Trp | Arg | Glu | Trp | Leu | Gly | Leu | Ile | Lys | Asn | Ser | Arg |
| | | | | | 85 | | | | 90 | | | | 95 | | |
| Phe | Tyr | Asn | Tyr | Thr | Val | Cys | Arg | Asn | Gly | Ile | Lys | Glu | Lys | His | Gly |
| | | | | | 100 | | | | 105 | | | | 110 | | |
| Phe | Asp | Tyr | Ala | Lys | Asp | Tyr | Phe | Thr | Asp | Leu | Ile | Thr | Asn | Glu | Ser |
| | | | | | 115 | | | | 120 | | | | 125 | | |
| Ile | Asn | Tyr | Phe | Lys | Met | Ser | lys | Arg | Met | Tyr | Pro | His | Arg | Pro | Val |
| | | | | | 130 | | | | 135 | | | | 140 | | |
| Met | Met | Val | Ile | Ser | His | Ala | Glu | Pro | His | Gly | Pro | Glu | Asp | Ser | Ala |
| | | | | | 145 | | | | 150 | | 155 | | | 160 | |
| Pro | Gln | Phe | Ser | Lys | Leu | Tyr | Pro | Asn | Ala | Ser | Gln | His | Ile | Thr | Pro |
| | | | | | 165 | | | | 170 | | | | 175 | | |
| Ser | Tyr | Asn | Tyr | Ala | Pro | Asn | Met | Asp | Lys | His | Trp | Ile | Met | Gln | Tyr |
| | | | | | 180 | | | | 185 | | | | 190 | | |
| Thr | Gly | Pro | Met | Leu | Pro | Ile | His | Met | Glu | Phe | Thr | Asn | Ile | Leu | Gln |
| | | | | | 195 | | | | 200 | | | | 205 | | |
| Arg | Lys | Arg | Leu | Gln | Thr | Leu | Met | Ser | Val | Asp | Asp | Ser | Val | Glu | Arg |
| | | | | | 210 | | | | 215 | | | | 220 | | |
| Leu | Tyr | Asn | Met | Leu | Val | Glu | Thr | Gly | Glu | Leu | Glu | Asn | Thr | Tyr | Ile |
| | | | | | 225 | | | | 230 | | 235 | | | 240 | |
| Ile | Tyr | Thr | Ala | Asp | His | Gly | Tyr | His | Ile | Gly | Gln | Phe | Gly | Leu | Val |
| | | | | | 245 | | | | 250 | | | | 255 | | |
| Lys | Gly | Lys | Ser | Met | Pro | Tyr | Asp | Phe | Asp | Ile | Arg | Val | Pro | Phe | Phe |
| | | | | | 260 | | | | 265 | | | | 270 | | |
| Ile | Arg | Gly | Pro | Ser | Val | Glu | Fro | Gly | Ser | Ile | Val | Pro | Gln | Ile | Val |
| | | | | | 275 | | | | 280 | | | | 285 | | |
| Leu | Asn | Ile | Asp | Leu | Ala | Pro | Thr | Ile | Leu | Asp | Ile | Ala | Gly | Leu | Asp |
| | | | | | 290 | | | | 295 | | | | 300 | | |
| Thr | Pro | Pro | Asp | Val | Asp | Gly | Lys | Ser | Val | Leu | Lys | Leu | Leu | Asp | Pro |
| | | | | | 305 | | | | 310 | | 315 | | | 320 | |
| Glu | Lys | Pro | Gly | Asn | Arg | Phe | Arg | Thr | Asn | Lys | Lys | Ala | Lys | Ile | Trp |
| | | | | | 325 | | | | 330 | | | | 335 | | |
| Arg | Asp | Thr | Phe | Leu | Val | Glu | Arg | Gly | Lys | Phe | Leu | Arg | Lys | Lys | Glu |
| | | | | | 340 | | | | 345 | | | | 350 | | |
| Glu | Ser | Ser | Lys | Asn | Ile | Gln | Gln | Ser | Asn | His | Leu | Pro | Lys | Tyr | Glu |
| | | | | | 355 | | | | 360 | | | | 365 | | |
| Arg | Val | Lys | Glu | Leu | Cys | Gln | Gln | Ala | Arg | Tyr | Gln | Thr | Ala | Cys | Glu |
| | | | | | 370 | | | | 375 | | | | 380 | | |
| Gln | Pro | Gly | Gln | Lys | Trp | Gln | Cys | Ile | Glu | Asp | Thr | Ser | Gly | Lys | Leu |
| | | | | | 385 | | | | 390 | | 395 | | | 400 | |
| Arg | Ile | His | Lys | Cys | Lys | Gly | Pro | Ser | Asp | Leu | Leu | Thr | Val | Arg | Gln |
| | | | | | 405 | | | | 410 | | | | 415 | | |
| Ser | Thr | Arg | Asn | Leu | Tyr | Ala | Arg | Gly | Phe | His | Asp | Lys | Asp | Lys | Glu |
| | | | | | 420 | | | | 425 | | | | 430 | | |
| Cys | Ser | Cys | Arg | Glu | Ser | Gly | Tyr | Arg | Ala | Ser | Arg | Ser | Gln | Arg | Lys |
| | | | | | 435 | | | | 440 | | | | 445 | | |
| Ser | Gln | Arg | Gln | Phe | Leu | Arg | Asn | Gln | Gly | Thr | Pro | Lys | Tyr | Lys | Pro |

| | | |
|---|-----|-----|
| 450 | 455 | 460 |
| Arg Phe Val His Thr Arg Gln Thr Arg Ser Leu Ser Val Glu Phe Glu | | |
| 455 | 470 | 475 |
| Gly Glu Ile Tyr Asp Ile Asn Leu Glu Glu Glu Glu Leu Gln Val | | 480 |
| 485 | 490 | 495 |
| Leu Gln Pro Arg Asn Ile Ala Lys Arg His Asp Glu Gly His Lys Gly | | |
| 500 | 505 | 510 |
| Pro Arg Asp Leu Gln Ala Ser Ser Gly Gly Asn Arg Gly Arg Met Leu | | |
| 515 | 520 | 525 |
| Ala Asp Ser Ser Asn Ala Val Gly Pro Pro Thr Thr Val Arg Val Thr | | |
| 530 | 535 | 540 |
| His Lys Cys Phe Ile Leu Pro Asn Asp Ser Ile His Cys Glu Arg Glu | | |
| 545 | 550 | 555 |
| Leu Tyr Gln Ser Ala Arg Ala Trp Lys Asp His Lys Ala Tyr Ile Asp | | 560 |
| 565 | 570 | 575 |
| Glu Glu Ile Glu Ala Leu Gln Asp Lys Ile Lys Asn Leu Arg Glu Val | | |
| 580 | 585 | 590 |
| Arg Gly His Leu Lys Arg Arg Lys Pro Glu Glu Cys Ser Cys Ser Lys | | |
| 595 | 600 | 605 |
| Gln Ser Tyr Tyr Asn Lys Glu Lys Gly Val Lys Lys Gln Glu Lys Leu | | |
| 610 | 615 | 620 |
| Lys Ser His Leu His Pro Phe Lys Glu Ala Ala Gln Glu Val Asp Ser | | |
| 625 | 630 | 635 |
| Lys Leu Gln Leu Phe Lys Glu Asn Asn Arg Arg Arg Lys Lys Glu Arg | | 640 |
| 645 | 650 | 655 |
| Lys Glu Lys Arg Arg Gln Arg Lys Gly Glu Glu Cys Ser Leu Pro Gly | | |
| 660 | 665 | 670 |
| Leu Thr Cys Phe Thr His Asp Asn Asn His Trp Gln Thr Ala Pro Phe | | |
| 675 | 680 | 685 |
| Trp Asn Leu Gly Ser Phe Cys Ala Cys Thr Ser Ser Asn Asn Asn Thr | | |
| 690 | 695 | 700 |
| Tyr Trp Cys Leu Arg Thr Val Asn Glu Thr His Asn Phe Leu Phe Cys | | |
| 705 | 710 | 715 |
| Glu Phe Ala Thr Gly Phe Leu Glu Tyr Phe Asp Met Asn Thr Asp Pro | | 720 |
| 725 | 730 | 735 |
| Tyr Gln Leu Thr Asn Thr Val His Thr Val Glu Arg Gly Ile Leu Asn | | |
| 740 | 745 | 750 |
| Gln Leu His Val Gln Leu Met Glu Leu Arg Ser Cys Gln Gly Tyr Lys | | |
| 755 | 760 | 765 |
| Gln Cys Asn Pro Arg Pro Lys Asn Leu Asp Val Gly Asn Lys Asp Gly | | |
| 770 | 775 | 780 |
| Gly Ser Tyr Asp Leu His Arg Gly Gln Leu Trp Asp Gly Trp Glu Gly | | |
| 785 | 790 | 795 |
| | | 800 |

<210> 1230
 <211> 698
 <212>Amino acid
 <213> Homo sapiens

| |
|---|
| <400> 1230 |
| His Leu Leu Ile Ala Gln Glu Leu Ala Asp Arg Val Gly Glu Gly Arg |
| 1 5 10 15 |
| Ala Cys Trp Ser Leu Gly Asn Ala Tyr Val Ser Met Gly Arg Pro Ala |
| 20 25 30 |
| Gln Ala Leu Thr Phe Ala Lys Lys His Leu Gln Ile Ser Gln Glu Ile |
| 35 40 45 |
| Gly Asp Arg His Gly Glu Leu Thr Ala Arg Met Asn Val Ala Gln Leu |

| | | |
|---|-----|-----|
| 50 | 55 | 60 |
| Gln Leu Val Leu Gly Arg Leu Thr Ser Pro Ala Ala Ser Glu Lys Pro | | |
| 65 | 70 | 75 |
| Asp Leu Ala Gly Tyr Glu Ala Gln Gly Ala Arg Pro Lys Arg Thr Gln | | 80 |
| 85 | 90 | 95 |
| Arg Leu Ser Ala Glu Thr Trp Asp Leu Leu Arg Leu Pro Leu Glu Arg | | |
| 100 | 105 | 110 |
| Glu Gln Asn Gly Asp Ser His His Ser Gly Asp Trp Arg Gly Pro Ser | | |
| 115 | 120 | 125 |
| Arg Asp Ser Leu Pro Leu Pro Val Arg Ser Arg Lys Tyr Gln Glu Gly | | |
| 130 | 135 | 140 |
| Pro Asp Ala Glu Arg Arg Pro Arg Glu Gly Ser His Ser Pro Leu Asp | | |
| 145 | 150 | 155 |
| Ser Ala Asp Val Arg Val His Val Pro Arg Thr Ser Ile Pro Arg Ala | | 160 |
| 165 | 170 | 175 |
| Pro Ser Ser Asp Glu Glu Cys Phe Phe Asp Leu Leu Thr Lys Phe Gln | | |
| 180 | 185 | 190 |
| Ser Ser Arg Met Asp Asp Gln Arg Cys Pro Leu Asp Asp Gly Gln Ala | | |
| 195 | 200 | 205 |
| Gly Ala Ala Glu Ala Ala Thr Ala Ala Pro Thr Leu Glu Asp Arg Ile Ala | | |
| 210 | 215 | 220 |
| Gln Pro Ser Met Thr Ala Ser Pro Gln Thr Glu Glu Phe Phe Asp Leu | | |
| 225 | 230 | 235 |
| Ile Ala Ser Ser Gln Ser Arg Arg Leu Asp Asp Gln Arg Ala Ser Val | | 240 |
| 245 | 250 | 255 |
| Gly Ser Leu Pro Gly Leu Arg Ile Thr His Ser Asn Ala Gly His Leu | | |
| 260 | 265 | 270 |
| Arg Gly His Gly Glu Pro Gln Glu Pro Gly Asp Asp Phe Phe Asn Met | | |
| 275 | 280 | 285 |
| Leu Ile Lys Tyr Gln Ser Ser Arg Ile Asp Asp Gln Arg Cys Pro Pro | | |
| 290 | 295 | 300 |
| Pro Asp Val Leu Pro Arg Gly Pro Thr Met Pro Asp Glu Asp Phe Phe | | |
| 305 | 310 | 315 |
| Ser Leu Ile Gln Arg Val Gln Ala Lys Arg Met Asp Glu Gln Arg Val | | 320 |
| 325 | 330 | 335 |
| Asp Leu Ala Gly Gly Pro Gly Ala Gly Gly Arg Arg Pro Ala Arg Ala | | |
| 340 | 345 | 350 |
| Pro Ala Ala Val Pro Ala Trp Cys Glu Leu Arg Pro Cys Ala His Arg | | |
| 355 | 360 | 365 |
| Gln Ala His Pro Ala Pro Thr Pro Gly Arg Arg Ser His Ser His Ser | | |
| 370 | 375 | 380 |
| His Val Leu Pro Arg Pro Leu Pro Arg Thr Gly His Ala Ala | | |
| 385 | 390 | 395 |
| Pro Arg Pro Pro Arg Pro Arg Ala Thr Gly Ser Gly Gln Ala Ala Arg | | 400 |
| 405 | 410 | 415 |
| Gly Gly Arg Ala Cys Phe His Pro Gly Leu Ala Pro Met Ala Leu Ser | | |
| 420 | 425 | 430 |
| Phe Leu Pro Ser Ala Pro Ala Ala Gly Arg Thr Gly Pro Ser Ala Cys | | |
| 435 | 440 | 445 |
| Arg Pro Arg Pro Gly Ala Val Arg Leu Pro His Pro Leu Pro Gln Ala | | |
| 450 | 455 | 460 |
| Leu Pro Val Leu Pro Cys Pro Ala Lys Cys Glu Thr Leu Leu Ser Pro | | |
| 465 | 470 | 475 |
| Ser Pro Ser Pro Lys Val Ser Leu Ser Arg Leu Leu Gly Pro Pro Arg | | 480 |
| 485 | 490 | 495 |
| Thr Gly Pro Cys Ser Val Pro Pro Glu Leu Val Leu Gly Trp Pro Cys | | |
| 500 | 505 | 510 |
| Asp Arg His Ala Pro Pro Leu Gln Leu Arg Pro Gly Ala Gly Leu Pro | | |
| 515 | 520 | 525 |
| Pro Ser Leu Ser Pro His Ser Pro Ala Arg Gly Gln Gln Pro Gln Lys | | |
| 530 | 535 | 540 |
| Ala Pro Gln Thr Thr His Gly Arg Pro Gly Cys Ser Gly Ser Pro Glu | | |
| 545 | 550 | 555 |
| Val Pro Pro Ala Glu Ser Gln Gly Pro Ala Gly Ala Ser Thr Gly Ala | | 560 |

| | | | |
|---|-----|-----|-----|
| | 565 | 570 | 575 |
| Gly Pro Ile Ser Lys Ala Glu Gly Met Ala Gly His Glu Leu Arg His | | | |
| 580 | 585 | 590 | |
| Ser Lys Thr Pro Ser Gln Glu Lys Gly Gln Gly Leu Val Leu Gly Met | | | |
| 595 | 600 | 605 | |
| Leu Thr Gly Ser Lys Ser Ser Ala Gln Ser Gly Trp Glu Val Ala Pro | | | |
| 610 | 615 | 620 | |
| Gly Ser Val Thr Leu Thr Gln Val Gly Gly Trp Ser Val Glu Ala Gly | | | |
| 625 | 630 | 635 | 640 |
| Glu Ala Ser Leu Ser Ser Thr Leu Gln Thr Pro His Met Arg Thr Pro | | | |
| 645 | 650 | 655 | |
| Leu Leu Pro Pro Ala Gly Gly Asp Asp Ile Thr Ala Leu Ser Met Gly | | | |
| 660 | 665 | 670 | |
| Arg Gly Leu Thr Gly His Gln Val Arg Asp Pro Arg Thr Gly Arg Thr | | | |
| 675 | 680 | 685 | |
| Cys Trp Ser Leu Arg Trp Ala Pro Gly Ala | | | |
| 690 | 695 | 698 | |

<210> 1231
<211> 131
<212>Amino acid
<213> Homo sapiens

| | | | |
|---|------------|-----|----|
| | <400> 1231 | | |
| Asn Ser Ala Ala Asp Leu Ala Ile Phe Ala Leu Trp Gly Leu Lys Pro | | | |
| 1 | 5 | 10 | 15 |
| Val Val Tyr Leu Leu Ala Ser Ser Phe Leu Gly Leu Gly Leu His Pro | | | |
| 20 | 25 | 30 | |
| Ile Ser Gly His Phe Val Ala Glu His Tyr Met Phe Leu Lys Gly His | | | |
| 35 | 40 | 45 | |
| Glu Thr Tyr Ser Tyr Tyr Gly Pro Leu Asn Trp Ile Thr Phe Asn Val | | | |
| 50 | 55 | 60 | |
| Gly Tyr His Val Glu His His Asp Phe Pro Ser Ile Pro Gly Tyr Asn | | | |
| 65 | 70 | 75 | 80 |
| Leu Pro Leu Val Arg Lys Ile Ala Pro Glu Tyr Tyr Asp His Leu Pro | | | |
| 85 | 90 | 95 | |
| Gln His His Ser Trp Val Lys Val Leu Trp Asp Phe Val Phe Glu Asp | | | |
| 100 | 105 | 110 | |
| Ser Leu Gly Pro Tyr Ala Arg Val Lys Arg Val Tyr Arg Leu Ala Lys | | | |
| 115 | 120 | 125 | |
| Asp Gly Leu | | | |
| 130 | 131 | | |

<210> 1232
<211> 71
<212>Amino acid
<213> Homo sapiens

| | | | |
|---|------------|----|----|
| | <400> 1232 | | |
| Gln Glu Ser Gly Phe Ser Cys Lys Gly Pro Gly Gln Asn Val Ala Val | | | |
| 1 | 5 | 10 | 15 |
| Thr Arg Ala His Pro Asp Ser Gln Gly Arg Arg Arg Arg Pro Glu Arg | | | |
| 20 | 25 | 30 | |
| Gly Ala Arg Gly Gly Gln Val Phe Tyr Asn Ser Glu Tyr Gly Glu Leu | | | |

| | | | | | |
|-----|-----|-----|-----|-----|-----|
| | 35 | | 40 | | 45 |
| Ser | Glu | Pro | Ser | Glu | Glu |
| | | | | Asp | His |
| | | | | Cys | Ser |
| | | | | Pro | Ala |
| | | | | | Arg |
| | | | | | Val |
| | | | | | Thr |
| 50 | | | | 55 | |
| Phe | Phe | Thr | Asp | Asn | Ser |
| | | | | | Tyr |
| 65 | | | | 70 | 71 |

<210> 1233
<211> 146
<212>Amino acid
<213> Homo sapiens

| | | | | | | | | | | | | | | | | |
|-----|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| | <400> 1233 | | | | | | | | | | | | | | | |
| Val | Ile | Val | His | Ala | Arg | Pro | Ile | Arg | Thr | Arg | Ala | Ser | Lys | Tyr | Tyr | |
| 1 | | | | | | | | | | | | | | | | |
| | | | | | 5 | | | 10 | | | | | | 15 | | |
| Ile | Pro | Glu | Ala | Val | Tyr | Gly | Leu | Pro | Ala | Tyr | Pro | Ala | Tyr | Ala | Gly | |
| | | | | | | | | | | | | | | | | |
| | | | | | 20 | | | 25 | | | | | | 30 | | |
| Gly | Gly | Gly | Phe | Val | Leu | Ser | Gly | Ala | Thr | Leu | His | Arg | Leu | Ala | Gly | |
| | | | | | | | | | | | | | | | | |
| | | | | | 35 | | | 40 | | | | | | 45 | | |
| Ala | Cys | Ala | Gln | Val | Glu | Leu | Phe | Pro | Ile | Asp | Asp | Val | Phe | Leu | Gly | |
| | | | | | | | | | | | | | | | | |
| | | | | | 50 | | | 55 | | | | | | 60 | | |
| Met | Cys | Leu | Gln | Arg | Leu | Arg | Leu | Thr | Pro | Glu | Pro | His | Pro | Ala | Phe | |
| | | | | | | | | | | | | | | | | |
| | | | | | 65 | | | 70 | | | | | | 75 | | |
| Arg | Thr | Phe | Gly | Ile | Pro | Gln | Pro | Ser | Ala | Ala | Pro | His | Leu | Ser | Thr | |
| | | | | | | | | | | | | | | | 80 | |
| | | | | | 85 | | | 90 | | | | | | 95 | | |
| Phe | Asp | Pro | Cys | Phe | Tyr | Arg | Glu | Leu | Val | Val | Val | His | Gly | Leu | Ser | |
| | | | | | | | | | | | | | | | | |
| | | | | | 100 | | | 105 | | | | | | 110 | | |
| Ala | Ala | Asp | Ile | Trp | Leu | Met | Trp | Arg | Leu | Leu | His | Gly | Pro | His | Gly | |
| | | | | | | | | | | | | | | | | |
| | | | | | 115 | | | 120 | | | | | | 125 | | |
| Pro | Ala | Cys | Ala | His | Pro | Gln | Pro | Val | Ala | Ala | Gly | Pro | Phe | Gln | Trp | |
| | | | | | 130 | | | 135 | | | | | | 140 | | |
| Asp | Ser | | | | | | | | | | | | | | | |
| 145 | 146 | | | | | | | | | | | | | | | |

<210> 1234
<211> 299
<212>Amino acid
<213> Homo sapiens

| | | | | | | | | | | | | | | | |
|-----|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | <400> 1234 | | | | | | | | | | | | | | |
| Met | Ala | Ser | Ala | Ala | Cys | Ser | Met | Asp | Pro | Ile | Asp | Ser | Phe | Glu | Leu |
| 1 | | | | | | | 5 | | | 10 | | | | 15 | |
| Leu | Asp | Leu | Leu | Phe | Asp | Arg | Gln | Asp | Gly | Ile | Leu | Arg | His | Val | Glu |
| | | | | | | | 20 | | | 25 | | | | 30 | |
| Leu | Gly | Glu | Gly | Trp | Gly | His | Val | Lys | Asp | Gln | Val | Leu | Pro | Asn | Pro |
| | | | | | | | | | | | | | | | |
| | | | | | 35 | | | 40 | | | | | | 45 | |
| Asp | Ser | Asp | Asp | Phe | Leu | Ser | Ser | Ile | Leu | Gly | Ser | Gly | Asp | Ser | Leu |
| | | | | | | | | | | | | | | | |
| | | | | | 50 | | | 55 | | | | | | 60 | |
| Pro | Ser | Ser | Pro | Leu | Trp | Ser | Pro | Glu | Gly | Ser | Asp | Ser | Gly | Ile | Ser |
| | | | | | | | | | | | | | | | |
| | | | | | 65 | | | 70 | | | 75 | | | 80 | |
| Glu | Asp | Leu | Pro | Ser | Asp | Pro | Gln | Asp | Thr | Pro | Pro | Arg | Ser | Gly | Pro |
| | | | | | | | | | | | | | | | |
| | | | | | 85 | | | 90 | | | | | | 95 | |
| Ala | Thr | Ser | Pro | Ala | Gly | Cys | His | Pro | Ala | Gln | Pro | Gly | Lys | Gly | Pro |
| | | | | | 100 | | | 105 | | | | | | 110 | |
| Cys | Leu | Ser | Tyr | His | Pro | Gly | Asn | Ser | Cys | Ser | Thr | Thr | Pro | Gly | |

| | | |
|---|-----|-----|
| 115 | 120 | 125 |
| Pro Val Ile Gln Gln Gln His His Leu Gly Ala Ser Tyr Leu Leu Arg | | |
| 130 | 135 | 140 |
| Pro Gly Ala Gly His Cys Glu Leu Val Leu Thr Glu Asp Glu Lys | | |
| 145 | 150 | 155 |
| Lys Leu Leu Ala Lys Glu Gly Ile Thr Leu Pro Thr Gln Leu Pro Leu | | 160 |
| 165 | 170 | 175 |
| Thr Lys Tyr Glu Glu Arg Val Leu Lys Ile Arg Arg Lys Ile Arg | | |
| 180 | 185 | 190 |
| Asn Lys Gln Ser Ala Gln Glu Ser Arg Lys Lys Lys Lys Glu Tyr Ile | | |
| 195 | 200 | 205 |
| Asp Gly Leu Thr Arg Ser Cys Cys Pro Leu Pro Ser Ser Ser | | |
| 210 | 215 | 220 |
| Ser Pro Pro Ser Ala Leu Leu Ala Pro Thr Lys Pro Arg Ala Leu Gly | | |
| 225 | 230 | 235 |
| Thr Leu Arg Leu Tyr Glu Cys Ser Pro Glu Leu Cys Thr Thr Met Leu | | 240 |
| 245 | 250 | 255 |
| Pro Pro Ala Trp Ile Leu Met Leu Cys Gln Ala Pro Arg Pro Gln Asp | | |
| 260 | 265 | 270 |
| Pro Asp Pro Arg Leu Thr Gln Pro Glu Lys Ser Leu Gln Glu Ala Pro | | |
| 275 | 280 | 285 |
| Gly Gln Thr Gly Ala Ser Arg Thr Pro Arg Thr | | |
| 290 | 295 | 299 |

<210> 1235
<211> 1098
<212> Amino acid
<213> Homo sapiens

| | | | |
|---|-----|-----|-----|
| <400> 1235 | | | |
| Ala Arg Gly Arg Arg Ser Arg Pro Val Trp Ala Ala Ser Trp Gly Gly | | | |
| 1 | 5 | 10 | 15 |
| Arg Gly Arg Pro Ala Ala Arg Arg Arg Pro Arg Gly Leu Ala Ala Thr | | | |
| 20 | 25 | 30 | |
| Met Gly Phe Glu Leu Asp Arg Phe Asp Gly Asp Val Asp Pro Asp Leu | | | |
| 35 | 40 | 45 | |
| Lys Cys Ala Leu Cys His Lys Val Leu Glu Asp Pro Leu Thr Thr Pro | | | |
| 50 | 55 | 60 | |
| Cys Gly His Val Phe Cys Ala Gly Cys Val Leu Pro Trp Val Val Gln | | | |
| 65 | 70 | 75 | 80 |
| Glu Gly Ser Cys Pro Ala Arg Cys Arg Gly Arg Leu Ser Ala Lys Glu | | | |
| 85 | 90 | 95 | |
| Leu Asn His Val Leu Pro Leu Lys Arg Leu Ile Leu Lys Leu Asp Ile | | | |
| 100 | 105 | 110 | |
| Lys Cys Ala Tyr Ala Thr Arg Gly Cys Gly Arg Val Val Lys Leu Gln | | | |
| 115 | 120 | 125 | |
| Gln Leu Pro Glu His Leu Glu Arg Cys Asp Phe Ala Pro Ala Arg Cys | | | |
| 130 | 135 | 140 | |
| Arg His Ala Gly Cys Gly Gln Val Leu Leu Arg Arg Asp Val Glu Ala | | | |
| 145 | 150 | 155 | 160 |
| His Met Arg Asp Ala Cys Asp Ala Arg Pro Val Gly Arg Cys Gln Glu | | | |
| 165 | 170 | 175 | |
| Gly Cys Gly Leu Pro Leu Thr His Gly Glu Gln Arg Ala Gly Gly His | | | |
| 180 | 185 | 190 | |
| Cys Cys Ala Arg Ala Leu Arg Ala His Asn Gly Ala Leu Gln Ala Arg | | | |
| 195 | 200 | 205 | |
| Leu Gly Ala Leu His Lys Ala Leu Lys Glu Ala Leu Arg Ala Gly | | | |
| 210 | 215 | 220 | |
| Lys Arg Glu Lys Ser Leu Val Ala Gln Leu Ala Ala Gln Leu Glu | | | |

| | | | |
|---|-----|-----|-----|
| 225 | 230 | 235 | 240 |
| Leu Gln Met Thr Ala Leu Arg Tyr Gln Lys Lys Phe Thr Glu Tyr Ser | | | |
| 245 | 250 | 255 | |
| Ala Arg Leu Asp Ser Leu Ser Arg Cys Val Ala Ala Pro Pro Gly Gly | | | |
| 260 | 265 | 270 | |
| Lys Gly Glu Glu Thr Lys Ser Leu Thr Leu Val Leu His Arg Asp Ser | | | |
| 275 | 280 | 285 | |
| Gly Ser Leu Gly Phe Asn Ile Ile Gly Gly Arg Pro Ser Val Asp Asn | | | |
| 290 | 295 | 300 | |
| His Asp Gly Ser Ser Ser Glu Gly Ile Phe Val Ser Lys Ile Val Asp | | | |
| 305 | 310 | 315 | 320 |
| Ser Gly Pro Ala Ala Lys Glu Gly Gly Leu Gln Ile His Asp Arg Ile | | | |
| 325 | 330 | 335 | |
| Ile Glu Val Asn Gly Arg Asp Leu Ser Arg Ala Thr His Asp Gln Ala | | | |
| 340 | 345 | 350 | |
| Val Glu Ala Phe Lys Thr Ala Lys Glu Pro Ile Val Val Gln Val Leu | | | |
| 355 | 360 | 365 | |
| Arg Arg Thr Pro Arg Thr Lys Met Phe Thr Pro Pro Ser Glu Ser Gln | | | |
| 370 | 375 | 380 | |
| Leu Val Asp Thr Gly Thr Gln Thr Asp Ile Thr Phe Glu His Ile Met | | | |
| 385 | 390 | 395 | 400 |
| Ala Leu Thr Lys Met Ser Ser Pro Ser Pro Pro Val Leu Asp Pro Tyr | | | |
| 405 | 410 | 415 | |
| Leu Leu Pro Glu Glu His Pro Ser Ala His Glu Tyr Tyr Asp Pro Asn | | | |
| 420 | 425 | 430 | |
| Asp Tyr Ile Gly Asp Ile His Gln Glu Met Asp Arg Glu Glu Leu Glu | | | |
| 435 | 440 | 445 | |
| Leu Glu Glu Val Asp Leu Tyr Arg Met Asn Ser Gln Asp Lys Leu Gly | | | |
| 450 | 455 | 460 | |
| Leu Thr Val Cys Tyr Arg Thr Asp Asp Glu Asp Asp Ile Gly Ile Tyr | | | |
| 465 | 470 | 475 | 480 |
| Ile Ser Glu Ile Asp Pro Asn Ser Ile Ala Ala Lys Asp Gly Arg Ile | | | |
| 485 | 490 | 495 | |
| Arg Glu Gly Asp Arg Ile Ile Gln Ile Asn Gly Ile Glu Val Gln Asn | | | |
| 500 | 505 | 510 | |
| Arg Glu Glu Ala Val Ala Leu Leu Thr Ser Glu Glu Asn Lys Asn Phe | | | |
| 515 | 520 | 525 | |
| Ser Leu Leu Ile Ala Arg Ala Glu Leu Gln Leu Asp Glu Gly Trp Met | | | |
| 530 | 535 | 540 | |
| Asp Asp Asp Arg Asn Asp Phe Leu Asp Asp Leu His Met Asp Met Leu | | | |
| 545 | 550 | 555 | 560 |
| Glù Glu Gln His His Gln Ala Met Gln Phe Thr Ala Ser Val Leu Gln | | | |
| 565 | 570 | 575 | |
| Gln Lys His Asp Glu Asp Gly Gly Thr Thr Asp Thr Ala Thr Ile | | | |
| 580 | 585 | 590 | |
| Leu Ser Asn Gln His Glu Lys Asp Ser Gly Val Gly Arg Thr Asp Glu | | | |
| 595 | 600 | 605 | |
| Ser Thr Arg Asn Asp Glu Ser Ser Glu Gln Glu Asn Asn Gly Asp Asp | | | |
| 610 | 615 | 620 | |
| Ala Thr Ala Ser Ser Asn Pro Leu Ala Gly Gln Arg Lys Leu Thr Cys | | | |
| 625 | 630 | 635 | 640 |
| Ser Gln Asp Thr Leu Gly Ser Gly Asp Leu Pro Phe Ser Asn Lys Ser | | | |
| 645 | 650 | 655 | |
| Phe Ile Ser Pro Glu Cys Thr Gly Ala Ala Tyr Leu Gly Ile Pro Val | | | |
| 660 | 665 | 670 | |
| Asp Glu Cys Glu Arg Phe Arg Glu Leu Leu Glu Leu Lys Cys Gln Val | | | |
| 675 | 680 | 685 | |
| Lys Ser Ala Thr Pro Tyr Gly Leu Tyr Tyr Pro Ser Gly Pro Leu Asp | | | |
| 690 | 695 | 700 | |
| Ala Gly Lys Ser Asp Pro Glu Ser Val Asp Lys Glu Leu Glu Leu Leu | | | |
| 705 | 710 | 715 | 720 |
| Asn Glu Glu Leu Arg Ser Ile Glu Leu Glu Cys Leu Ser Ile Val Arg | | | |
| 725 | 730 | 735 | |
| Ala His Lys Met Gln Gln Leu Lys Glu Gln Tyr Arg Glu Ser Trp Met | | | |

| | | |
|---|------|------|
| 740 | 745 | 750 |
| Leu His Asn Ser Gly Phe Arg Asn Tyr Asn Thr Ser Ile Asp Val Arg | | |
| 755 | 760 | 765 |
| Arg His Glu Leu Ser Asp Ile Thr Glu Leu Pro Glu Lys Ser Asp Lys | | |
| 770 | 775 | 780 |
| Asp Ser Ser Ser Ala Tyr Asn Thr Gly Glu Ser Cys Arg Ser Thr Pro | | |
| 785 | 790 | 795 |
| Leu Thr Leu Glu Ile Ser Pro Asp Asn Ser Leu Arg Arg Ala Ala Glu | | |
| 805 | 810 | 815 |
| Gly Ile Ser Cys Pro Ser Ser Glu Gly Ala Val Gly Thr Thr Glu Ala | | |
| 820 | 825 | 830 |
| Tyr Gly Pro Ala Ser Lys Asn Leu Leu Ser Ile Thr Glu Asp Pro Glu | | |
| 835 | 840 | 845 |
| Val Gly Thr Pro Thr Tyr Ser Pro Ser Leu Lys Glu Leu Asp Pro Asn | | |
| 850 | 855 | 860 |
| Gln Pro Leu Glu Ser Lys Glu Arg Arg Ala Ser Asp Gly Ser Arg Ser | | |
| 865 | 870 | 875 |
| Pro Thr Pro Ser Gln Lys Leu Gly Ser Ala Tyr Leu Pro Ser Tyr His | | |
| 885 | 890 | 895 |
| His Ser Pro Tyr Lys His Ala His Ile Pro Ala His Ala Gln His Tyr | | |
| 900 | 905 | 910 |
| Gln Ser Tyr Met Gln Leu Ile Gln Gln Lys Ser Ala Val Glu Tyr Ala | | |
| 915 | 920 | 925 |
| Gln Ser Gln Met Ser Leu Val Ser Met Cys Lys Asp Leu Ser Ser Pro | | |
| 930 | 935 | 940 |
| Thr Pro Ser Glu Pro Arg Met Glu Trp Lys Val Lys Ile Arg Ser Asp | | |
| 945 | 950 | 955 |
| Gly Thr Arg Tyr Ile Thr Lys Arg Pro Val Arg Asp Arg Leu Leu Arg | | |
| 965 | 970 | 975 |
| Glu Arg Ala Leu Lys Ile Arg Glu Glu Arg Ser Gly Met Thr Thr Asp | | |
| 980 | 985 | 990 |
| Asp Asp Ala Val Ser Glu Met Lys Met Gly Arg Tyr Trp Ser Lys Glu | | |
| 995 | 1000 | 1005 |
| Glu Arg Lys Gln His Leu Val Lys Ala Lys Glu Gln Arg Arg Arg | | |
| 1010 | 1015 | 1020 |
| Glu Phe Met Met Gln Ser Arg Leu Asp Cys Leu Lys Glu Gln Ala | | |
| 1025 | 1030 | 1035 |
| Ala Asp Asp Arg Lys Glu Met Asn Ile Leu Glu Leu Ser His Lys | | |
| 1045 | 1050 | 1055 |
| Met Met Lys Lys Arg Asn Lys Lys Ile Phe Asp Asn Trp Met Thr Ile | | |
| 1060 | 1065 | 1070 |
| Gln Glu Leu Leu Thr His Gly Thr Lys Ser Pro Asp Gly Thr Arg Val | | |
| 1075 | 1080 | 1085 |
| Tyr Asn Ser Phe Leu Ser Val Thr Thr Val | | |
| 1090 | 1095 | 1098 |

<210> 1236
 <211> 51
 <212>Amino acid
 <213> Homo sapiens

| | | |
|---|----|----|
| <400> 1236 | | |
| Phe Phe Phe Leu Val Glu Met Gly Phe Cys His Val Gly Gln Gly Gly | | |
| 1 | 5 | 10 |
| Leu Thr Leu Ile Gly Ser Ser Asn Leu Pro Ala Ser Ala Ser Lys Ser | | |
| 20 | 25 | 30 |
| Ala Gly Ile Thr Gly Val Ser His Cys Ala Arg Pro Asp Phe Lys Ser | | |
| 35 | 40 | 45 |
| Cys Val Glu | | |

50 51

<210> 1237
<211> 70
<212>Amino acid
<213> Homo sapiens

<400> 1237
Leu Ala Gly Arg Lys Val Leu Leu Phe Val Ser Gly Tyr Val Val Gly
1 5 10 15
Trp Gly Pro Ile Thr Trp Leu Leu Met Ser Glu Val Leu Pro Leu Arg
20 25 30
Ala Arg Gly Val Ala Ser Gly Leu Cys Val Leu Ala Ser Trp Leu Thr
35 40 45
Ala Phe Val Leu Thr Lys Ser Phe Leu Pro Gly Gly Val Ser Val Gln
50 55 60
Pro Gln Ala Pro Gly Pro
65 70

<210> 1238
<211> 114
<212>Amino acid
<213> Homo sapiens

<400> 1238
Phe Trp Ala Pro Gly Pro Pro Gly Val Gly Ala Ala Val Gly Asp Ala
1 5 10 15
Ser Thr Arg Ser Leu Arg Glu Ser Cys Pro Ser Pro Ser Pro Gly Arg
20 25 30
Leu Arg Arg Thr Thr Ala Pro Trp Ser Ser Gln Ala Arg Ala Ala Ala
35 40 45
Pro Ala Pro Ser Ser Ser Cys Arg Gly Pro Asp Gly Ala Ser Ser Pro
50 55 60
Arg Asp Leu Pro Trp Arg Pro Trp Lys Ile Leu Arg Arg Thr Pro Leu
65 70 75 80
Ser Gly Asp Val Glu Leu Ser Gln Val His Pro Asp Gln Arg Ile Leu
85 90 95
Arg Arg Phe Ile Leu Ser Arg Thr Cys Gly Asn Thr Ile Pro Gly Met
100 105 110
Ala Glu
114

<210> 1239
<211> 174
<212>Amino acid
<213> Homo sapiens

<400> 1239
Met Arg Arg Phe Ile Ser Lys Val Tyr Ser Phe Pro Met Arg Lys Leu

| | | | |
|---|-----|-----|-----|
| 1 | 5 | 10 | 15 |
| Ile Leu Phe Leu Val Phe Pro Val Val Arg Gln Thr Pro Thr Gln His | 20 | 25 | 30 |
| Phe Lys Asn Gln Phe Pro Ala Leu His Trp Glu His Glu Leu Gly Leu | 35 | 40 | 45 |
| Ala Phe Thr Lys Asn Arg Met Asn Tyr Thr Asn Lys Phe Leu Leu Ile | 50 | 55 | 60 |
| Pro Glu Ser Gly Asp Tyr Phe Ile Tyr Ser Gln Val Thr Phe Arg Gly | 65 | 70 | 75 |
| Met Thr Ser Glu Cys Ser Glu Ile Arg Gln Ala Gly Arg Pro Asn Lys | 85 | 90 | 95 |
| Pro Asp Ser Ile Thr Val Val Ile Thr Lys Val Thr Asp Ser Tyr Pro | 100 | 105 | 110 |
| Glu Pro Thr Gln Leu Leu Met Gly Thr Lys Ser Val Cys Glu Val Gly | 115 | 120 | 125 |
| Ser Asn Trp Phe Gln Pro Ile Tyr Leu Gly Ala Met Phe Ser Leu Gln | 130 | 135 | 140 |
| Glu Gly Asp Lys Leu Met Val Asn Val Ser Asp Ile Ser Leu Val Asp | 145 | 150 | 155 |
| Tyr Thr Lys Glu Asp Lys Thr Phe Phe Gly Ala Phe Leu Leu | 165 | 170 | 174 |

<210> 1240
<211> 425
<212>Amino acid
<213> Homo sapiens

| | | | |
|---|-----|-----|-----|
| <400> 1240 | | | |
| Phe Val Trp Asp Glu Val Ala Gln Arg Ser Gly Cys Glu Glu Arg Trp | 1 | 5 | 10 |
| Leu Val Ile Asp Arg Lys Val Tyr Asn Ile Ser Glu Phe Thr Arg Arg | 20 | 25 | 30 |
| His Pro Gly Gly Ser Arg Val Ile Ser His Tyr Ala Gly Gln Asp Ala | 35 | 40 | 45 |
| Thr Asp Pro Phe Val Ala Phe His Ile Asn Lys Gly Leu Val Lys Lys | 50 | 55 | 60 |
| Tyr Met Asn Ser Leu Leu Ile Gly Glu Leu Ser Pro Glu Gln Pro Ser | 65 | 70 | 75 |
| Phe Glu Pro Thr Lys Asn Lys Glu Leu Thr Asp Glu Phe Arg Glu Leu | 85 | 90 | 95 |
| Arg Ala Thr Val Glu Arg Met Gly Leu Met Lys Ala Asn His Val Phe | 100 | 105 | 110 |
| Phe Leu Leu Tyr Leu Leu His Ile Leu Leu Asp Gly Ala Ala Trp | 115 | 120 | 125 |
| Leu Thr Leu Trp Val Phe Gly Thr Ser Phe Leu Pro Phe Leu Leu Cys | 130 | 135 | 140 |
| Ala Val Leu Leu Ser Ala Val Gln Ala Gln Ala Gly Trp Leu Gln His | 145 | 150 | 155 |
| Asp Phe Gly His Leu Ser Val Phe Ser Thr Ser Lys Trp Asn His Leu | 165 | 170 | 175 |
| Leu His His Phe Val Ile Gly His Leu Lys Gly Ala Pro Ala Ser Trp | 180 | 185 | 190 |
| Trp Asn His Met His Phe Gln His His Ala Lys Pro Asn Cys Phe Arg | 195 | 200 | 205 |
| Lys Asp Pro Asp Ile Asn Met His Pro Phe Phe Phe Ala Leu Gly Lys | 210 | 215 | 220 |
| Ile Leu Ser Val Glu Leu Gly Lys Gln Lys Lys Lys Tyr Met Pro Tyr | 225 | 230 | 235 |
| Asn His Gln His Lys Tyr Phe Phe Leu Ile Gly Pro Pro Ala Leu Leu | | | 240 |

| | | | |
|---|-----|-----|-----|
| 245 | 245 | 250 | 255 |
| Pro Leu Tyr Phe Gln Trp Tyr Ile Phe Tyr Phe Val Ile Gln Arg Lys | | | |
| 260 | 265 | 270 | |
| Lys Trp Val Asp Leu Ala Trp Met Ile Thr Phe Tyr Val Arg Phe Phe | | | |
| 275 | 280 | 285 | |
| Leu Thr Tyr Val Pro Leu Leu Gly Leu Lys Ala Phe Leu Gly Leu Phe | | | |
| 290 | 295 | 300 | |
| Phe Ile Val Arg Phe Leu Glu Ser Asn Trp Phe Val Trp Val Thr Gln | | | |
| 305 | 310 | 315 | 320 |
| Met Asn His Ile Pro Met His Ile Asp His Asp Arg Asn Met Asp Trp | | | |
| 325 | 330 | 335 | |
| Val Ser Thr Gln Leu Gln Ala Thr Cys Asn Val His Lys Ser Ala Phe | | | |
| 340 | 345 | 350 | |
| Asn Asp Trp Phe Ser Gly His Leu Asn Phe Gln Ile Glu His His Leu | | | |
| 355 | 360 | 365 | |
| Phe Pro Thr Met Pro Arg His Asn Tyr His Lys Val Ala Pro Leu Val | | | |
| 370 | 375 | 380 | |
| Gln Ser Leu Cys Ala Lys His Gly Ile Glu Tyr Gln Ser Lys Pro Leu | | | |
| 385 | 390 | 395 | 400 |
| Leu Ser Ala Phe Ala Asp Ile Ile His Ser Leu Lys Glu Ser Gly Gln | | | |
| 405 | 410 | 415 | |
| Leu Trp Leu Asp Ala Tyr Leu His Gln | | | |
| 420 | 425 | | |

<210> 1241
<211> 152
<212>Amino acid
<213> Homo sapiens

| | | | |
|---|-----|-----|----|
| <400> 1241 | | | |
| Gln Cys Gly Gly Ile Pro Tyr Asn Thr Thr Gln Phe Leu Met Asn Asp | | | |
| 1 | 5 | 10 | 15 |
| Arg Asp Pro Glu Glu Pro Asn Leu Asp Val Pro His Gly Ile Ser His | | | |
| 20 | 25 | 30 | |
| Pro Gly Ser Ser Gly Glu Ser Glu Ala Gly Asp Ser Asp Gly Arg Gly | | | |
| 35 | 40 | 45 | |
| Arg Ala His Gly Glu Phe Gln Arg Lys Asp Phe Ser Glu Thr Tyr Glu | | | |
| 50 | 55 | 60 | |
| Arg Phe His Thr Glu Ser Leu Gln Gly Arg Ser Lys Gln Glu Leu Val | | | |
| 65 | 70 | 75 | 80 |
| Arg Asp Tyr Leu Glu Leu Glu Lys Arg Leu Ser Gln Ala Glu Glu Glu | | | |
| 85 | 90 | 95 | |
| Thr Arg Arg Leu Gln Gln Leu Gln Ala Cys Thr Gly Gln Gln Ser Cys | | | |
| 100 | 105 | 110 | |
| Arg Gln Val Glu Glu Leu Ala Ala Glu Val Gln Arg Leu Arg Thr Glu | | | |
| 115 | 120 | 125 | |
| Asn Gln Arg Leu Arg Gln Glu Asn Gln Met Trp Asn Arg Glu Gly Cys | | | |
| 130 | 135 | 140 | |
| Arg Cys Asp Glu Glu Pro Gly Thr | | | |
| 145 | 150 | 152 | |

<210> 1242
<211> 191
<212>Amino acid
<213> Homo sapiens

<400> 1242
 Ser Pro Glu Arg Ser Ser Leu Ser Val Gly Arg Glu Lys Ala Met Glu
 1 5 10 15
 Val Pro Pro Pro Ala Pro Arg Ser Phe Leu Cys Arg Ala Leu Cys Leu
 20 25 30
 Phe Pro Arg Val Phe Ala Ala Glu Ala Val Thr Ala Asp Ser Glu Val
 35 40 45
 Leu Glu Glu Arg Gln Lys Arg Leu Pro Tyr Val Pro Glu Pro Tyr Tyr
 50 55 60
 Pro Glu Ser Gly Trp Asp Arg Leu Arg Glu Leu Phe Gly Lys Asp Val
 65 70 75 80
 Thr Gly Ser Leu Phe Arg Ile Asn Val Gly Leu Arg Gly Leu Val Ala
 85 90 95
 Gly Gly Ile Ile Gly Ala Leu Leu Gly Thr Pro Val Gly Leu Leu
 100 105 110
 Met Ala Phe Gln Lys Tyr Ser Gly Glu Thr Val Gln Glu Arg Lys Gln
 115 120 125
 Lys Asp Arg Lys Ala Leu His Glu Leu Lys Leu Glu Glu Trp Lys Gly
 130 135 140
 Arg Ile Gln Val Thr Glu His Leu Pro Glu Lys Ile Glu Ser Ser Leu
 145 150 155 160
 Gln Glu Asp Glu Pro Glu Asn Asp Ala Lys Lys Ile Glu Ala Leu Leu
 165 170 175
 Asn Leu Pro Arg Asn Pro Ser Val Ile Asp Lys Gln Asp Lys Asp
 180 185 190 191

<210> 1243
<211> 381
<212>Amino acid
<213> Homo sapiens

<400> 1243
 Arg Ser Leu Gly Leu Ala Val Thr Glu Met Val Pro Trp Val Arg Thr
 1 5 10 15
 Met Gly Gln Lys Leu Lys Gln Arg Leu Arg Leu Asp Val Gly Arg Glu
 20 25 30
 Ile Cys Arg Gln Tyr Pro Leu Phe Cys Phe Leu Leu Cys Leu Ser
 35 40 45
 Ala Ala Ser Leu Leu Leu Asn Arg Tyr Ile His Ile Leu Met Ile Phe
 50 55 60
 Trp Ser Phe Val Ala Gly Val Val Thr Phe Tyr Cys Ser Leu Gly Pro
 65 70 75 80
 Asp Ser Leu Leu Pro Asn Ile Phe Phe Thr Ile Lys Tyr Lys Pro Lys
 85 90 95
 Gln Leu Gly Leu Gln Glu Leu Phe Pro Gln Gly His Ser Cys Ala Val
 100 105 110
 Cys Gly Lys Val Lys Cys Lys Arg His Arg Pro Ser Leu Leu Glu
 115 120 125
 Asn Tyr Gln Pro Trp Leu Asp Leu Lys Ile Ser Ser Lys Val Asp Ala
 130 135 140
 Ser Leu Ser Glu Val Leu Glu Leu Val Leu Glu Asn Phe Val Tyr Pro
 145 150 155 160
 Trp Tyr Arg Asp Val Thr Asp Asp Glu Ser Phe Val Asp Glu Leu Arg
 165 170 175
 Ile Thr Leu Arg Phe Phe Ala Ser Val Leu Ile Arg Arg Ile His Lys
 180 185 190
 Val Asp Ile Pro Ser Ile Ile Thr Lys Lys Leu Leu Lys Ala Ala Met

| | | |
|---|-----|-----|
| 195 | 200 | 205 |
| Lys His Ile Glu Val Ile Val Lys Ala Arg Gln Lys Val Lys Asn Thr | 210 | 215 |
| 220 | | |
| Glu Phe Leu Gln Gln Ala Ala Leu Glu Glu Tyr Gly Pro Glu Leu His | 225 | 230 |
| 235 | | |
| 240 | | |
| Val Ala Leu Arg Ser Arg Arg Asp Glu Leu His Tyr Leu Arg Lys Leu | 245 | 250 |
| 255 | | |
| Thr Glu Leu Leu Phe Pro Tyr Ile Leu Pro Pro Lys Ala Thr Asp Cys | 260 | 265 |
| 270 | | |
| Arg Ser Leu Thr Leu Leu Ile Arg Glu Ile Leu Ser Gly Ser Val Phe | 275 | 280 |
| 285 | | |
| Leu Pro Ser Leu Asp Phe Leu Ala Asp Pro Asp Thr Val Asn His Leu | 290 | 295 |
| 300 | | |
| Leu Ile Ile Phe Ile Asp Asp Ser Pro Pro Glu Lys Ala Thr Glu Pro | 295 | 310 |
| 315 | | |
| 320 | | |
| Ala Ser Pro Leu Val Pro Phe Leu Gln Lys Phe Ala Glu Pro Arg Asn | 325 | 330 |
| 335 | | |
| Lys Lys Pro Ser Val Leu Lys Leu Glu Leu Lys Gln Ile Arg Glu Gln | 340 | 345 |
| 350 | | |
| Gln Asp Leu Leu Phe Arg Phe Met Asn Phe Leu Lys Gln Glu Gly Ala | 355 | 360 |
| 365 | | |
| Val His Val Leu His Val Leu Phe Asp Cys Gly Gly Ile | 370 | 375 |
| 380 | 381 | |

<210> 1244
<211> 371
<212>Amino acid
<213> Homo sapiens

| |
|---|
| <400> 1244 |
| Gln Ser Leu Ala Glu Val Leu Gln Gln Leu Gly Ala Ser Ser Glu Leu |
| 1 5 10 15 |
| Gln Ala Val Leu Ser Tyr Ile Phe Pro Thr Tyr Gly Val Thr Pro Asn |
| 20 25 30 |
| His Ser Ala Phe Ser Met His Ala Leu Leu Val Asn His Tyr Met Lys |
| 35 40 45 |
| Gly Gly Phe Tyr Pro Arg Gly Val Thr Ser Glu Ile Ala Phe His Thr |
| 50 55 60 |
| Ile Pro Val Ile Gln Arg Ala Gly Gly Ala Val Leu Thr Lys Ala Thr |
| 65 70 75 80 |
| Val Gln Ser Val Leu Leu Asp Ser Ala Gly Lys Ala Cys Gly Val Ser |
| 85 90 95 |
| Val Lys Lys Gly His Glu Leu Val Asn Ile Tyr Cys Pro Ile Val Val |
| 100 105 110 |
| Ser Asn Ala Gly Leu Phe Asn Thr Tyr Glu His Leu Leu Pro Gly Asn |
| 115 120 125 |
| Ala Arg Cys Leu Pro Gly Val Lys Gln Gln Leu Gly Thr Val Arg Pro |
| 130 135 140 |
| Gly Leu Gly Met Thr Ser Val Phe Ile Cys Leu Arg Gly Thr Lys Glu |
| 145 150 155 160 |
| Asp Leu His Leu Pro Ser Thr Asn Tyr Tyr Val Tyr Tyr Asp Thr Asp |
| 165 170 175 |
| Met Asp Gln Ala Met Glu Arg Tyr Val Ser Met Pro Arg Glu Glu Ala |
| 180 185 190 |
| Ala Glu His Ile Pro Leu Leu Phe Phe Ala Phe Pro Ser Ala Lys Asp |
| 195 200 205 |
| Pro Thr Trp Glu Asp Arg Phe Pro Gly Arg Ser Thr Met Ile Met Leu |
| 210 215 220 |
| Ile Pro Thr Ala Tyr Glu Trp Phe Glu Glu Trp Gln Ala Glu Leu Lys |

| | | | |
|---|-----|-----|-----|
| 225 | 230 | 235 | 240 |
| Gly Lys Arg Gly Ser Asp Tyr Glu Thr Phe Lys Asn Ser Phe Val Glu | | | |
| 245 | 250 | 255 | |
| Ala Ser Met Ser Val Val Leu Lys Leu Phe Pro Gln Leu Glu Gly Lys | | | |
| 260 | 265 | 270 | |
| Val Glu Ser Val Thr Ala Gly Ser Pro Leu Thr Asn Gln Phe Tyr Leu | | | |
| 275 | 280 | 285 | |
| Ala Ala Pro Arg Gly Ala Cys Tyr Gly Ala Asp His Asp Leu Gly Arg | | | |
| 290 | 295 | 300 | |
| Leu His Pro Cys Val Met Ala Ser Leu Arg Ala Gln Ser Pro Ile Pro | | | |
| 305 | 310 | 315 | 320 |
| Asn Leu Tyr Leu Thr Gly Gln Asp Ile Phe Thr Cys Gly Leu Val Gly | | | |
| 325 | 330 | 335 | |
| Ala Leu Gln Gly Ala Leu Leu Cys Ser Ser Thr Ile Leu Lys Arg Asn | | | |
| 340 | 345 | 350 | |
| Leu Tyr Ser Asp Leu Lys Asn Leu Asp Ser Arg Ile Arg Ala Gln Lys | | | |
| 355 | 360 | 365 | |
| Lys Lys Asn | | | |
| 370 371 | | | |

<210> 1245
 <211> 295
 <212>Amino acid
 <213> Homo sapiens

| | | | |
|---|-----|-----|-----|
| <400> 1245 | | | |
| Arg Pro Gln Glu Thr Arg Val Leu Gln Val Ser Cys Gly Arg Ala His | | | |
| 1 | 5 | 10 | 15 |
| Ser Leu Val Leu Thr Asp Arg Glu Gly Val Phe Ser Met Gly Asn Asn | | | |
| 20 | 25 | 30 | |
| Ser Tyr Gly Gln Cys Gly Arg Lys Val Val Glu Asn Glu Ile Tyr Ser | | | |
| 35 | 40 | 45 | |
| Glu Ser His Arg Val His Arg Met Gln Asp Phe Asp Gly Gln Val Val | | | |
| 50 | 55 | 60 | |
| Gln Val Ala Cys Gly Gln Asp His Ser Leu Phe Leu Thr Asp Lys Gly | | | |
| 65 | 70 | 75 | 80 |
| Glu Val Tyr Ser Cys Gly Trp Gly Ala Asp Gly Gln Thr Gly Leu Gly | | | |
| 85 | 90 | 95 | |
| His Tyr Asn Ile Thr Ser Ser Pro Thr Lys Leu Gly Gly Asp Leu Ala | | | |
| 100 | 105 | 110 | |
| Gly Val Asn Val Ile Gln Val Ala Thr Tyr Gly Asp Cys Cys Leu Ala | | | |
| 115 | 120 | 125 | |
| Val Ser Ala Asp Gly Gly Leu Phe Gly Trp Gly Asn Ser Glu Tyr Leu | | | |
| 130 | 135 | 140 | |
| Gln Leu Ala Ser Val Thr Asp Ser Thr Gln Val Asn Val Pro Arg Cys | | | |
| 145 | 150 | 155 | 160 |
| Leu His Phe Ser Gly Val Gly Lys Val Arg Gln Ala Ala Cys Gly Gly | | | |
| 165 | 170 | 175 | |
| Thr Gly Cys Ala Val Leu Asn Gly Glu Gly His Val Phe Val Trp Gly | | | |
| 180 | 185 | 190 | |
| Tyr Gly Ile Leu Gly Lys Gly Pro Asn Leu Val Glu Ser Ala Val Pro | | | |
| 195 | 200 | 205 | |
| Glu Met Ile Pro Pro Thr Leu Phe Gly Leu Thr Glu Phe Asn Pro Glu | | | |
| 210 | 215 | 220 | |
| Ile Gln Val Ser Arg Ile Arg Cys Gly Leu Ser His Phe Ala Ala Leu | | | |
| 225 | 230 | 235 | 240 |
| Thr Asn Lys Gly Glu Leu Phe Val Trp Gly Lys Asn Ile Arg Gly Cys | | | |
| 245 | 250 | 255 | |
| Leu Gly Ile Gly Arg Leu Glu Asp Gln Tyr Phe Pro Trp Arg Val Thr | | | |

| | | |
|---|-----|-----|
| 260 | 265 | 270 |
| Met Pro Gly Glu Pro Val Asp Val Ala Cys Gly Val Asp His Met Val | | |
| 275 | 280 | 285 |
| Thr Leu Ala Lys Ser Phe Ile | | |
| 290 | 295 | |

<210> 1246
<211> 172
<212>Amino acid
<213> Homo sapiens

| | | |
|---|-----|-----|
| <400> 1246 | | |
| Leu Pro Phe Arg Glu Trp Leu Met Ile Val Val Ser Leu Ser Ala Ala | | |
| 1 | 5 | 10 |
| Ala Val Ala Ala Ala Phe Met Ala Lys Cys Arg Met Val Leu Ser Ser | | |
| 20 | 25 | 30 |
| Arg Tyr Phe Cys Ser His Phe Val Met Ser Ala Ser Arg Ala Arg Ile | | |
| 35 | 40 | 45 |
| Arg Ser Ser Phe Ser Arg Thr Ser Ser Arg Arg Ala Gly Ala Leu Tyr | | |
| 50 | 55 | 60 |
| Ser Gly Met Leu Ala Gly Trp Pro Phe Pro Cys Phe Cys Trp Val Leu | | |
| 65 | 70 | 75 |
| Ser Ala Ser Ser Leu Ser Ser Gln Val Arg Ser Leu Arg Ser Ile | | |
| 85 | 90 | 95 |
| Cys Ser Arg Phe Ser His Ala Asp Cys Ser Trp Val Arg Ala Cys Cys | | |
| 100 | 105 | 110 |
| Ser Phe Ser Thr Phe Ser Thr Tyr Ala Cys Phe Ser Arg Asn Ser Ser | | |
| 115 | 120 | 125 |
| Ser Ser Leu Met Thr Leu Ala Trp Ala Leu Leu Lys Ala Trp Ser Arg | | |
| 130 | 135 | 140 |
| Ile Ser Met Cys Leu Arg Trp Ser Ser Leu Ala Val Arg Thr Ala Ala | | |
| 145 | 150 | 155 |
| Asn Ser Ile Ser Asn Phe Ser Phe Ser Phe Lys Asn | | |
| 165 | 170 | 172 |

<210> 1247
<211> 361
<212>Amino acid
<213> Homo sapiens

| | | |
|---|----|----|
| <400> 1247 | | |
| Met Gln Ala Val Arg Ala Thr Ala Ser Gln Ser Leu Ser Cys Ala Arg | | |
| 1 | 5 | 10 |
| Ala Pro Arg Glu Pro Thr Gln His Ala Leu Arg Ala His Trp Phe Pro | | |
| 20 | 25 | 30 |
| Pro Ala Ala Ala Val Gln Pro Ser Pro His Ser Gly Val Ala Ala Ala | | |
| 35 | 40 | 45 |
| Ala Gly Thr Trp Ser Ser Ala Phe Arg Gly Glu His Pro Leu Val Ser | | |
| 50 | 55 | 60 |
| Ser Gly Leu Leu Leu Gly Val Arg Glu Gln Ser Phe Arg Leu Leu Arg | | |
| 65 | 70 | 75 |
| Ser Lys Ala Gly Thr His Met Tyr Leu Glu His Thr Ser His Cys Pro | | |
| 85 | 90 | 95 |
| His His Asp Asp Asp Thr Ala Met Asp Thr Pro Leu Pro Arg Pro Arg | | |

| | | |
|---|-----|-----|
| 100 | 105 | 110 |
| Pro Leu Leu Ala Val Glu Arg Thr Gly Gln Arg Pro Leu Trp Ala Pro | | |
| 115 | 120 | 125 |
| Ser Leu Glu Leu Pro Lys Pro Asp Met Gln Pro Leu Pro Ala Gly Ala | | |
| 130 | 135 | 140 |
| Phe Leu Glu Glu Val Ala Glu Gly Thr Pro Ala Gln Thr Glu Ser Glu | | |
| 145 | 150 | 155 |
| Pro Lys Val Leu Asp Pro Glu Glu Asp Leu Leu Cys Ile Ala Lys Thr | | 160 |
| 165 | 170 | 175 |
| Phe Ser Tyr Leu Arg Glu Ser Gly Trp Tyr Trp Gly Ser Ile Thr Ala | | |
| 180 | 185 | 190 |
| Ser Glu Ala Arg Gln His Leu Gln Lys Met Pro Glu Gly Thr Phe Leu | | |
| 195 | 200 | 205 |
| Val Arg Asp Ser Thr His Pro Ser Tyr Leu Phe Thr Leu Ser Val Lys | | |
| 210 | 215 | 220 |
| Thr Thr Arg Gly Pro Thr Asn Val Arg Ile Glu Tyr Ala Asp Ser Ser | | |
| 225 | 230 | 235 |
| Phe Arg Leu Asp Ser Asn Cys Leu Ser Arg Pro Arg Ile Leu Ala Phe | | 240 |
| 245 | 250 | 255 |
| Pro Asp Val Val Ser Leu Val Gln His Tyr Val Ala Ser Cys Thr Ala | | |
| 260 | 265 | 270 |
| Asp Thr Arg Ser Asp Ser Pro Asp Pro Ala Pro Thr Pro Ala Leu Pro | | |
| 275 | 280 | 285 |
| Met Pro Lys Glu Asp Ala Pro Ser Asp Pro Ala Leu Pro Ala Pro Pro | | |
| 290 | 295 | 300 |
| Pro Ala Thr Ala Val His Leu Lys Leu Val Gln Pro Phe Val Arg Arg | | |
| 305 | 310 | 315 |
| Ser Ser Ala Arg Ser Leu Gln His Leu Cys Arg Leu Val Ile Asn Arg | | 320 |
| 325 | 330 | 335 |
| Leu Val Ala Asp Val Asp Cys Leu Pro Leu Pro Arg Arg Met Ala Asp | | |
| 340 | 345 | 350 |
| Tyr Leu Arg Gln Tyr Pro Phe Gln Leu | | |
| 355 | 360 | 361 |

<210> 1248
 <211> 279
 <212> Amino acid
 <213> Homo sapiens

| | | | |
|---|-----|-----|----|
| <400> 1248 | | | |
| Phe Val Asp Ile Phe Gln Arg Trp Lys Glu Cys Arg Gly Lys Ser Pro | | | |
| 1 | 5 | 10 | 15 |
| Ala Gln Ala Glu Leu Ser Tyr Leu Asp Lys Ala Lys Trp Leu Glu Met | | | |
| 20 | 25 | 30 | |
| Tyr Gly Val Asp Met His Val Val Arg Gly Arg Asp Gly Cys Glu Tyr | | | |
| 35 | 40 | 45 | |
| Ser Leu Gly Leu Thr Pro Thr Gly Ile Leu Ile Phe Glu Gly Ala Asn | | | |
| 50 | 55 | 60 | |
| Lys Ile Gly Leu Phe Phe Trp Pro Lys Ile Thr Lys Met Asp Phe Lys | | | |
| 65 | 70 | 75 | 80 |
| Lys Ser Ser Lys Leu Thr Leu Val Val Glu Asp Asp Asp Gln Gly Arg | | | |
| 85 | 90 | 95 | |
| Glu Gln Glu His Thr Phe Val Phe Arg Leu Asp Ser Ala Arg Thr Cys | | | |
| 100 | 105 | 110 | |
| Lys His Leu Trp Lys Cys Ala Val Glu His His Ala Phe Phe Arg Leu | | | |
| 115 | 120 | 125 | |
| Arg Thr Pro Gly Asn Ser Lys Ser Asn Arg Ser Asp Phe Ile Arg Leu | | | |
| 130 | 135 | 140 | |
| Gly Ser Arg Phe Arg Phe Ser Gly Arg Thr Glu Tyr Gln Ala Thr His | | | |

| | | | |
|---|-----|-----|-----|
| 145 | 150 | 155 | 160 |
| Gly Ser Arg Leu Arg Arg Thr Ser Thr Phe Glu Arg Lys Pro Ser Lys | | | |
| 165 | 170 | 175 | |
| Arg Tyr Pro Ser Arg Arg His Ser Thr Phe Lys Ala Ser Asn Pro Val | | | |
| 180 | 185 | 190 | |
| Ile Ala Ala Gln Leu Cys Ser Lys Thr Asn Pro Glu Val His Asn Tyr | | | |
| 195 | 200 | 205 | |
| Gln Pro Gln Tyr His Pro Asn Ile His Pro Ser Gln Pro Arg Trp His | | | |
| 210 | 215 | 220 | |
| Pro His Ser Pro Asn Val Arg Pro Ser Phe Gln Asp Asp Arg Ser His | | | |
| 225 | 230 | 235 | 240 |
| Trp Lys Ala Ser Ala Ser Gly Asp Asp Ser His Phe Asp Tyr Val His | | | |
| 245 | 250 | 255 | |
| Asp Gln Asn Gln Lys Asn Leu Gly Gly Met Gln Ser Met Met Tyr Arg | | | |
| 260 | 265 | 270 | |
| Asp Lys Leu Met Thr Ala Leu | | | |
| 275 | 279 | | |

<210> 1249

<211> 255

<212> Amino acid

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(255)

<223> X = any amino acid or stop code

| | | | |
|---|-----|-----|-----|
| <400> 1249 | | | |
| Gly Gly Ile Arg Leu Ile Gln Lys Leu Thr Trp Arg Ser Arg Gln Gln | | | |
| 1 | 5 | 10 | 15 |
| Asp Arg Glu Asn Cys Ala Met Lys Gly Lys His Lys Asp Glu Cys His | | | |
| 20 | 25 | 30 | |
| Asn Phe Ile Lys Val Phe Val Pro Arg Asn Asp Glu Met Val Phe Val | | | |
| 35 | 40 | 45 | |
| Cys Gly Thr Asn Ala Phe Asn Pro Met Cys Arg Tyr Tyr Arg Val Ser | | | |
| 50 | 55 | 60 | |
| Ile Phe Tyr Val Ile Cys Phe Phe Xaa Ser Thr Phe Leu Pro Ser Leu | | | |
| 65 | 70 | 75 | 80 |
| Ile Cys Cys Xaa Ser Xaa Asn Leu Ser Ala Phe Gln Xaa Phe Val Leu | | | |
| 85 | 90 | 95 | |
| Ser Leu Val Gln Xaa Lys Asn Lys Asp Arg Ile Leu Gln Met Glu Phe | | | |
| 100 | 105 | 110 | |
| Xaa Tyr Xaa Asn Ser Ile Ala Phe Lys Arg Ala Arg Xaa Ile Asp | | | |
| 115 | 120 | 125 | |
| Met Thr Leu Ala Ile Tyr Phe Ser Phe Val Leu Ser Thr Leu Xaa Tyr | | | |
| 130 | 135 | 140 | |
| Asp GLy Glu Glu Ile Ser Gly Leu Ala Arg Cys Pro Phe Asp Ala Arg | | | |
| 145 | 150 | 155 | 160 |
| Gln Thr Asn Gly Ala Leu Phe Ala Asp Gly Lys Leu Tyr Ser Ala Thr | | | |
| 165 | 170 | 175 | |
| Val Ala Asp Phe Leu Ala Ser Asp Ala Val Ile Tyr Arg Ser Met Gly | | | |
| 180 | 185 | 190 | |
| Asp Gly Ser Ala Leu Arg Thr Ile Lys Tyr Asp Ser Lys Trp Ile Lys | | | |
| 195 | 200 | 205 | |
| Glu Pro His Phe Leu Tyr Ala Ile Lys Tyr Gly Asn Tyr Val Phe | | | |
| 210 | 215 | 220 | |
| Ser Phe Arg Glu Ile Val Ala Thr Xaa Xaa Leu Gly Lys Ala Val Asp | | | |
| 225 | 230 | 235 | 240 |

| | |
|---|-----|
| Ser Arg Val Ala Arg Tyr Glu Lys Gln Leu Val Gly Pro Thr Val | |
| 245 | 250 |
| | 255 |

<210> 1250
<211> 307
<212>Amino acid
<213> Homo sapiens

| | | |
|---|-----|-----|
| <400> 1250 | | |
| Ala Arg Ala Leu Ala Arg Glu Arg Glu Ser Glu Ser Ala Arg Ala Asp | | |
| 1 | 5 | 10 |
| Asp Val Thr Leu Gly Val Ser Ala Ile Leu Ala Val Asp Arg Gly Gly | | |
| 20 | 25 | 30 |
| Asn Leu Gly Ser Ala Asp Gly Trp Ala Tyr Ile Asp Val Glu Val Arg | | |
| 35 | 40 | 45 |
| Arg Pro Trp Ala Phe Val Gly Pro Gly Cys Ser Arg Ser Ser Gly Asn | | |
| 50 | 55 | 60 |
| Gly Ser Thr Ala Tyr Gly Leu Val Gly Ser Pro Arg Trp Leu Ser Pro | | |
| 65 | 70 | 75 |
| Phe His Thr Gly Ala Val Ser Leu Pro Arg Arg Pro Arg Gly Pro | | |
| 85 | 90 | 95 |
| Gly Pro Val Leu Gly Val Ala Arg Pro Cys Leu Arg Cys Val Leu Arg | | |
| 100 | 105 | 110 |
| Pro Glu His Tyr Glu Pro Gly Ser His Tyr Ser Gly Phe Ala Gly Arg | | |
| 115 | 120 | 125 |
| Asp Ala Ser Arg Ala Phe Val Thr Gly Asp Cys Ser Glu Ala Gly Leu | | |
| 130 | 135 | 140 |
| Val Asp Asp Val Ser Asp Leu Ser Ala Ala Glu Met Leu Thr Leu His | | |
| 145 | 150 | 155 |
| Asn Trp Leu Ser Phe Tyr Glu Lys Asn Tyr Val Cys Val Gly Arg Val | | |
| 165 | 170 | 175 |
| Thr Gly Arg Phe Tyr Gly Glu Asp Gly Leu Pro Thr Pro Ala Leu Thr | | |
| 180 | 185 | 190 |
| Gln Val Glu Ala Ala Ile Thr Arg Gly Leu Glu Ala Asn Lys Leu Gln | | |
| 195 | 200 | 205 |
| Leu Gln Glu Lys Gln Thr Phe Pro Pro Cys Asn Ala Glu Trp Ser Ser | | |
| 210 | 215 | 220 |
| Ala Arg Gly Ser Arg Leu Trp Cys Ser Gln Lys Ser Gly Gly Val Ser | | |
| 225 | 230 | 235 |
| Arg Asp Trp Ile Gly Val Pro Arg Lys Leu Tyr Lys Pro Gly Ala Lys | | |
| 245 | 250 | 255 |
| Glu Pro Arg Cys Val Cys Val Arg Thr Gly Pro Pro Ser Gly Gln | | |
| 260 | 265 | 270 |
| Met Pro Asp Asn Pro Pro His Arg Asn Arg Gly Asp Leu Asp His Pro | | |
| 275 | 280 | 285 |
| Asn Leu Ala Glu Tyr Thr Gly Cys Pro Pro Leu Ala Ile Thr Cys Ser | | |
| 290 | 295 | 300 |
| Phe Pro Leu | | |
| 305 | 307 | |

<210> 1251
<211> 100
<212>Amino acid
<213> Homo sapiens

<400> 1251
 Tyr Phe Ile Ile Cys Arg Asp Gly Val Leu Leu Phe Cys Pro Gly Trp
 1 5 10 15
 Ser Gln Thr Pro Gly Ala Gln Ala Ile Leu Leu His Trp Ala Thr Gln
 20 25 30
 Asn Ala Gly Met Thr Asp Met Ser His Ser Ala Gln Pro Ile Tyr Leu
 35 40 45
 Phe Ile Tyr Leu Ile Arg Thr Arg Ser His Tyr Val Ala Gln Ala Gly
 50 55 60
 Gln Leu Leu Asp Ser Asn Asp Ser Pro Asn Val Ala Ser Gln Asn Val
 65 70 75 80
 Gly Ile Thr Gly Met Ser His His Ala Trp Leu Lys Ile Val Leu Tyr
 85 90 95
 Phe Cys Ile Ile
 100

<210> 1252
<211> 464
<212>Amino acid
<213> Homo sapiens

<400> 1252
 Pro Ala Ala Arg Pro Pro Ser Leu Val Arg Leu Ser Pro Ser Pro Pro
 1 5 10 15
 Lys Pro Arg Ala Arg Ala Arg Ala Pro Gln Ser Val Glu Pro Ala Ala
 20 25 30
 Pro Leu Val Ala Arg Gly Ser Ser Pro Pro Ala Arg Pro Ala Pro Ala
 35 40 45
 Met Val Arg Pro Arg Arg Ala Pro Tyr Arg Ser Gly Ala Gly Gly Pro
 50 55 60
 Leu Gly Gly Arg Gly Arg Pro Pro Arg Pro Leu Val Val Arg Ala Val
 65 70 75 80
 Arg Ser Arg Ser Trp Pro Ala Ser Pro Arg Gly Pro Gln Pro Pro Arg
 85 90 95
 Ile Arg Ala Arg Ser Ala Pro Pro Met Glu Gly Ala Arg Val Phe Gly
 100 105 110
 Ala Leu Gly Pro Ile Gly Pro Ser Ser Pro Gly Leu Thr Leu Gly Gly
 115 120 125
 Leu Ala Val Ser Glu His Arg Leu Ser Asn Lys Leu Leu Ala Trp Ser
 130 135 140
 Gly Val Leu Glu Trp Gln-Glu Lys Arg Arg Pro Tyr Ser Asp Ser Thr
 145 150 155 160
 Ala Lys Leu Lys Arg Thr Leu Pro Cys Gln Ala Tyr Val Asn Gln Gly
 165 170 175
 Glu Asn Leu Glu Thr Asp Gln Trp Pro Gln Lys Leu Ile Met Gln Leu
 180 185 190
 Ile Pro Gln Gln Leu Leu Thr Thr Leu Gly Pro Leu Phe Arg Asn Ser
 195 200 205
 Gln Leu Ala Gln Phe His Phe Thr Asn Arg Asp Cys Asp Ser Leu Lys
 210 215 220
 Gly Leu Cys Arg Ile Met Gly Asn Gly Phe Ala Gly Cys Met Leu Phe
 225 230 235 240
 Pro His Ile Ser Pro Cys Glu Val Arg Val Leu Met Leu Leu Tyr Ser
 245 250 255
 Ser Lys Lys Ile Phe Met Gly Leu Ile Pro Tyr Asp Gln Ser Gly
 260 265 270
 Phe Val Ser Ala Ile Arg Gln Val Ile Thr Thr Arg Lys Gln Ala Val
 275 280 285

Gly Pro Gly Val Asn Ser Gly Pro Val Gln Ile Val Asn Asn Lys
 290 295 300
 Phe Leu Ala Trp Ser Gly Val Met Glu Trp Gln Glu Pro Arg Pro Glu
 305 310 315 320
 Pro Asn Ser Arg Ser Lys Arg Trp Leu Pro Ser His Val Tyr Val Asn
 325 330 335
 Gln Gly Glu Ile Leu Arg Thr Glu Gln Trp Pro Arg Lys Leu Tyr Met
 340 345 350
 Gln Leu Ile Pro Gln Gln Leu Leu Thr Thr Leu Val Pro Leu Phe Arg
 355 360 365
 Asn Ser Arg Leu Val Gln Phe His Phe Thr Lys Asp Leu Glu Thr Leu
 370 375 380
 Lys Ser Leu Cys Arg Ile Met Asp Asn Gly Phe Ala Gly Cys Val His
 385 390 395 400
 Phe Ser Tyr Lys Ala Ser Cys Glu Ile Arg Val Leu Met Leu Leu Tyr
 405 410 415
 Ser Ser Glu Lys Ile Phe Ile Gly Leu Ile Pro His Asp Gln Gly
 420 425 430
 Asn Phe Val Asn Gly Ile Arg Arg Val Ile Ala Asn Gln Gln Gln Val
 435 440 445
 Leu Gln Arg Asn Leu Glu Gln Glu Gln Gln Arg Gly Met Gly Gly
 450 455 460 464

<210> 1253
<211> 214
<212>Amino acid
<213> Homo sapiens

<400> 1253
 Gly Arg Pro Ala Leu Gly Arg Glu Ala Pro Pro Gln Ala Gly Leu Ser
 1 5 10 15
 Ser Thr Pro Pro Pro Cys Ser Glu Thr Cys Thr Met Gly Pro His Ser
 20 25 30
 Ile Leu Arg Thr Val His Cys Arg Pro Thr Lys Thr Pro Pro Glu Pro
 35 40 45
 Ser Ala Glu Pro His Pro Leu Ser Leu Leu Thr Ser Ser Asn Thr Ser
 50 55 60
 Leu Ala Gly Thr Ser Leu Gly Arg Asp Leu Thr Pro Gly Gly Lys
 65 70 75 80
 Pro Pro Ser Gly Gln Thr Pro Arg Asn Pro Glu Ser Pro Arg His Arg
 85 90 95
 Leu Gly Ser Pro Arg Gly Arg Arg Trp Leu Ala Ser Pro Thr Pro Thr
 100 105 110
 Gly Ser Gly Arg Ser Gly Pro Ala Ser Arg Gly Gln Arg Arg Leu Ser
 115 120 125
 Cys Ala Ala Gln Asp Pro Thr Ser Glu Gly Ala Ser Val Gly Ala Met
 130 135 140
 Glu Ala Gly Leu Gly Pro Pro Thr Ala Ala Pro Arg Gly Val Val Ser
 145 150 155 160
 Glu Ala Ala Glu Ser Leu Gly Gly Thr Leu Ser Trp Gly Ala Trp Gly
 165 170 175
 Arg Pro Pro Ala Gly Pro Ser Gly Leu Ala Gly Arg Arg Ser Arg Arg
 180 185 190
 Glu Ala Leu Arg Pro Asp Arg Lys Glu Ala Ser Val Met Met Ala Ala
 195 200 205
 Val Ser Ala Ile Gln Pro
 210 214

<210> 1254
 <211> 198
 <212> Amino acid
 <213> Homo sapiens

 <220>
 <221> misc_feature
 <222> (1)...(198)
 <223> X = any amino acid or stop code

<400> 1254
 Pro Gly Val Pro Thr His Gly Trp Pro Arg Ser Arg Val Leu Thr Arg
 1 5 10 15
 Val Arg Gly Ser Arg Gly Ser Gly Lys Met Ala Ala Ala Val Val Leu
 20 25 30
 Ala Ala Gly Leu Arg Ala Ala Arg Arg Ala Val Ala Ala Thr Gly Val
 35 40 45
 Arg Gly Gly Gln Val Arg Gly Ala Ala Gly Val Thr Asp Gly Asn Glu
 50 55 60
 Val Ala Lys Ala Gln Ala Thr Pro Gly Gly Ala Ala Pro Thr Ile
 65 70 75 80
 Phe Ser Arg Ile Leu Asp Lys Ser Leu Pro Ala Asp Ile Leu Tyr Glu
 85 90 95
 Asp Gln Gln Cys Leu Val Phe Arg Asp Val Ala Pro Gln Ala Pro Val
 100 105 110
 His Phe Leu Val Ile Pro Lys Lys Pro Ile Pro Arg Ile Ser Gln Ala
 115 120 125
 Glu Glu Glu Asp Gln Gln Leu Thr Tyr Val Pro Pro Leu Ser Leu Xaa
 130 135 140
 Leu Leu Gly His Leu Leu Val Ala Lys Gln Thr Ala Lys Ala Glu
 145 150 155 160
 Gly Leu Gly Asp Gly Tyr Arg Leu Val Ile Asn Asp Gly Lys Leu Gly
 165 170 175
 Ala Gln Ser Val Tyr His Leu His Ile His Val Leu Gly Gly Arg Gln
 180 185 190
 Leu Gln Trp Pro Pro Gly
 195 198

<210> 1255
 <211> 458
 <212> Amino acid
 <213> Homo sapiens

 <220>
 <221> misc_feature
 <222> (1)...(458)
 <223> X = any amino acid or stop code

<400> 1255
 Val Pro Asn Tyr Leu Pro Ser Val Ser Ser Ala Ile Gly Gly Glu Val
 1 5 10 15
 Pro Gln Arg Tyr Val Trp Arg Phe Cys Ile Gly Leu His Ser Ala Pro
 20 25 30

Arg Phe Leu Val Ala Phe Ala Tyr Trp Asn His Tyr Leu Ser Cys Thr
 35 40 45
 Ser Pro Cys Ser Cys Tyr Arg Pro Leu Cys Arg Leu Asn Phe Gly Leu
 50 55 60
 Asn Val Val Glu Asn Leu Ala Leu Leu Val Leu Thr Tyr Val Ser Ser
 65 70 75 80
 Ser Glu Asp Phe Thr Trp Val Pro Gly Xaa Gly Arg Ser Gly Glu Val
 85 90 95
 Phe Pro Glu Gly Thr Gly Leu Pro Leu Pro His Ser Asp Leu Pro Thr
 100 105 110
 Ser Trp Cys Gly His Ser Leu Gln Cys Gly Ser Gln Ser Ser Phe Pro
 115 120 125
 Pro Ala Ile His Glu Asn Ala Phe Ile Val Phe Ile Ala Ser Ser Leu
 130 135 140
 Gly His Met Leu Leu Thr Cys Ile Leu Trp Arg Leu Thr Lys Lys His
 145 150 155 160
 Thr Val Ser Gln Glu Asp Gly Leu Ser Leu Ala Gly Ala Pro Arg Gln
 165 170 175
 Pro Arg Arg Lys Ser Arg Thr Ser Val Leu Arg Ile Arg Val Met Val
 180 185 190
 Arg Trp Glu Leu Ser Ser Asn Gly Asn Pro Gly Arg Gly Val Leu Gly
 195 200 205
 Leu Gly Leu Gly Leu Gly Asn Lys Leu Arg Val Val Gly Gln Asn Leu
 210 215 220
 Gly Leu Xaa His Cys Val Trp Val Val Trp Glu Thr Gly Glu Xaa Lys
 225 230 235 240
 Arg Trp Arg Leu Gln Met Gly Ile Glu Xaa Gly Val Ala Ser Arg Arg
 245 250 255
 Gln Xaa Val Arg Asn Ser Val Arg Gly Leu Val Cys His Asn Ser Ser
 260 265 270
 Ala Pro Pro Met Tyr Met Gly Phe Phe Ser Pro Thr Val Phe Gly Gly
 275 280 285
 Gly Val Gly Gly Xaa Leu His Val Thr Phe Ile Leu His Pro Pro Glu
 290 295 300
 Val Glu Ala Ala Gly Ile Pro Leu Leu Leu Gly Pro Ser Leu Pro Gln
 305 310 315 320
 Arg Gln Gly Arg Glu His Ile Val Val Ile Leu Ala Ala Pro Ala Cys
 325 330 335
 Ala Pro Phe His Asp Arg Xaa Trp Glu Pro Arg Glu Ile Arg Pro Ser
 340 345 350
 Pro Xaa Glu Leu Gly Leu Arg Gly Glu Pro Thr Leu Ser Tyr Pro Ala
 355 360 365
 Ser Cys Arg Val Ile Arg Gln Pro Ile Pro Xaa Asp Arg Lys Ser Tyr
 370 375 380
 Ser Trp Lys Gln Arg Leu Phe Ile Ile Asn Phe Ile Ser Phe Ser
 385 390 395 400
 Ala Leu Ala Val Tyr Phe Arg His Asn Met Tyr Cys Glu Ala Gly Val
 405 410 415
 Tyr Thr Ile Phe Ala Ile Leu Glu Tyr Thr Val Val Leu Thr Asn Met
 420 425 430
 Ala Phe His Met Thr Ala Trp Trp Asp Phe Gly Asn Lys Glu Leu Leu
 435 440 445
 Ile Thr Ser Gln Pro Glu Glu Lys Arg Phe
 450 455 458

<210> 1256

<211> 83

<212>Amino acid

<213> Homo sapiens

<400> 1256
 Ile Asp Leu Leu Glu Ile Arg Asn Gly Pro Arg Ser His Glu Ser Phe
 1 5 10 15
 Gln Glu Met Asp Leu Asn Asp Asp Trp Lys Leu Ser Lys Asp Glu Val
 20 25 30
 Lys Ala Tyr Leu Lys Lys Glu Phe Glu Lys His Gly Ala Val Val Asn
 35 40 45
 Glu Ser His His Asp Ala Leu Val Glu Asp Ile Phe Asp Lys Glu Asp
 50 55 60
 Glu Asp Lys Asp Gly Phe Ile Ser Ala Arg Glu Phe Thr Tyr Lys His
 65 70 75 80
 Asp Glu Leu
 83

<210> 1257
<211> 203
<212>Amino acid
<213> Homo sapiens

<400> 1257
 Pro Arg Val Arg Gly Arg Val Gly Lys Glu Gly Ala Ala Ala Lys Pro
 1 5 10 15
 Arg Ser Leu Leu Arg Arg Phe Gln Leu Leu Ser Trp Ser Val Cys Gly
 20 25 30
 Gly Asn Lys Asp Pro Trp Val Gln Glu Leu Met Ser Cys Leu Asp Leu
 35 40 45
 Lys Glu Cys Gly His Ala Tyr Ser Gly Ile Val Ala His Gln Lys His
 50 55 60
 Leu Leu Pro Thr Ser Pro Pro Ile Ser Gln Ala Ser Glu Gly Ala Ser
 65 70 75 80
 Ser Asp Ile His Thr Pro Ala Gln Met Leu Leu Ser Thr Leu Gln Ser
 85 90 95
 Thr Gln Arg Pro Thr Leu Pro Val Gly Ser Leu Ser Ser Asp Lys Glu
 100 105 110
 Leu Thr Arg Pro Asn Glu Thr Ile His Thr Ala Gly His Ser Leu
 115 120 125
 Ala Ala Gly Pro Glu Ala Gly Glu Asn Gln Lys Gln Pro Glu Lys Asn
 130 135 140
 Ala Gly Pro Thr Ala Arg Thr Ser Ala Thr Val Pro Val Leu Cys Leu
 145 150 155 160
 Leu Ala Ile Ile Phe Ile Leu Thr Ala Ala Leu Ser Tyr Val Leu Cys
 165 170 175
 Lys Arg Arg Gly Gln Ser Pro Gln Ser Ser Pro Asp Leu Pro Val
 180 185 190
 His Tyr Ile Pro Val Ala Pro Asp Ser Asn Thr
 195 200 203

<210> 1258
<211> 195
<212>Amino acid
<213> Homo sapiens

<400> 1258

Leu Ile Ile Ser Asn Phe Leu Lys Ala Lys Gln Lys Pro Gly Ser Thr
 1 5 10 15
 Pro Asn Leu Gln Gln Lys Lys Ser Gln Ala Arg Leu Ala Pro Asp Ile
 20 25 30
 Val Ser Ala Ser Gln Tyr Arg Lys Phe Asp Glu Phe Gln Thr Gly Ile
 35 40 45
 Leu Ile Tyr Glu Leu Leu His Gln Pro Asn Pro Phe Glu Val Arg Ala
 50 55 60
 Gln Leu Arg Glu Arg Asp Tyr Arg Gln Glu Asp Leu Pro Pro Leu Pro
 65 70 75 80
 Ala Leu Ser Leu Tyr Ser Pro Gly Leu Gln Gln Leu Ala His Leu Leu
 85 90 95
 Leu Glu Ala Asp Pro Ile Lys Arg Ile Arg Ile Gly Glu Ala Lys Arg
 100 105 110
 Val Leu Gln Cys Leu Leu Trp Gly Pro Arg Arg Glu Leu Val Gln Gln
 115 120 125
 Pro Gly Thr Ser Glu Glu Ala Leu Cys Gly Thr Leu His Asn Trp Ile
 130 135 140
 Asp Met Lys Arg Ala Leu Met Met Met Lys Phe Ala Glu Lys Ala Val
 145 150 155 160
 Asp Arg Arg Arg Gly Val Glu Leu Glu Asp Trp Leu Cys Cys Gln Tyr
 165 170 175
 Leu Ala Ser Ala Glu Pro Gly Ala Leu Leu Gln Ser Leu Lys Leu Leu
 180 185 190
 Gln Leu Leu
 195

<210> 1259
 <211> 672
 <212> Amino acid
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(672)
 <223> X = any amino acid or stop code

<400> 1259
 Lys Arg Gly Leu Ile Val Val Met Ala His Glu Met Ile Gly Thr Gln
 1 5 10 15
 Ile Val Thr Glu Arg Gly Val Ala Leu Leu Glu Ser Gly Thr Glu Lys
 20 25 30
 Val Leu Leu Ile Asp Ser Arg Pro Phe Val Glu Tyr Asn Thr Ser His
 35 40 45
 Ile Leu Glu Ala Ile Asn Ile Asn Cys Ser Lys Leu Met Lys Arg Arg
 50 55 60
 Leu Gln Gln Asp Lys Val Leu Ile Thr Glu Leu Ile Gln His Ser Ala
 65 70 75 80
 Lys His Lys Val Asp Ile Asp Cys Ser Gln Lys Val Val Val Tyr Asp
 85 90 95
 Gln Ser Ser Gln Asp Val Ala Ser Leu Ser Asp Cys Phe Leu Thr
 100 105 110
 Val Leu Leu Gly Lys Leu Glu Lys Ser Phe Asn Ser Val His Leu Leu
 115 120 125
 Ala Gly Gly Phe Ala Glu Phe Ser Arg Cys Phe Pro Gly Leu Cys Glu
 130 135 140
 Gly Lys Ser Thr Leu Val Pro Thr Cys Ile Ser Gln Pro Cys Leu Pro
 145 150 155 160
 Val Ala Asn Ile Gly Pro Thr Arg Ile Leu Pro Asn Leu Tyr Leu Gly

| | | |
|---|-----|-----|
| 165 | 170 | 175 |
| Cys Gln Arg Asp Val Leu Asn Lys Glu Leu Met Gln Gln Asn Gly Ile | | |
| 180 | 185 | 190 |
| Gly Tyr Val Leu Asn Ala Ser Asn Thr Cys Pro Lys Pro Asp Phe Ile | | |
| 195 | 200 | 205 |
| Pro Glu Ser His Phe Leu Arg Val Pro Val Asn Asp Ser Phe Cys Glu | | |
| 210 | 215 | 220 |
| Lys Ile Leu Pro Trp Leu Asp Lys Ser Val Asp Phe Ile Glu Lys Ala | | |
| 225 | 230 | 235 |
| Lys Ala Ser Asn Gly Cys Val Leu Val His Cys Leu Ala Gly Ile Ser | | |
| 245 | 250 | 255 |
| Arg Ser Ala Thr Ile Ala Ile Ala Tyr Ile Met Lys Arg Met Asp Met | | |
| 260 | 265 | 270 |
| Ser Leu Asp Glu Ala Tyr Arg Phe Val Lys Glu Lys Arg Pro Thr Ile | | |
| 275 | 280 | 285 |
| Ser Pro Asn Phe Asn Phe Leu Gly Gln Leu Leu Asp Tyr Glu Lys Lys | | |
| 290 | 295 | 300 |
| Ile Iys Asn Gln Thr Gly Ala Ser Gly Pro Lys Ser Lys Leu Lys Leu | | |
| 305 | 310 | 315 |
| Leu His Leu Glu Lys Pro Asn Glu Pro Val Pro Ala Val Ser Glu Gly | | |
| 325 | 330 | 335 |
| Gly Gln Lys Ser Glu Thr Pro Leu Ser Pro Pro Cys Ala Asp Ser Ala | | |
| 340 | 345 | 350 |
| Thr Ser Glu Ala Ala Gly Gln Arg Pro Val His Pro Ala Ser Val Pro | | |
| 355 | 360 | 365 |
| Ser Val Pro Ser Val Gln Pro Ser Leu Leu Glu Asp Ser Pro Leu Val | | |
| 370 | 375 | 380 |
| Gln Ala Leu Ser Gly Leu His Leu Ser Ala Asp Arg Leu Glu Asp Ser | | |
| 385 | 390 | 395 |
| Asn Lys Leu Lys Arg Ser Phe Ser Leu Asp Ile Lys Ser Val Ser Tyr | | |
| 405 | 410 | 415 |
| Ser Ala Ser Met Ala Ala Ser Leu His Gly Phe Ser Ser Ser Glu Asp | | |
| 420 | 425 | 430 |
| Ala Leu Glu Tyr Tyr Lys Pro Ser Thr Thr Leu Asp Gly Thr Asn Lys | | |
| 435 | 440 | 445 |
| Leu Cys Gln Phe Ser Pro Val Gln Glu Leu Cys Gly Ala Asp Ser Arg | | |
| 450 | 455 | 460 |
| Asn Gln Ser Xaa Xaa Gly Gly Ser Gln Pro Ser Pro Arg Ser Cys Arg | | |
| 465 | 470 | 475 |
| Pro Pro Gly Leu Gln Thr Ala Arg Ala Ser Asp Cys Ile Arg Ser Glu | | |
| 485 | 490 | 495 |
| Pro Ala Ala Val Ala Pro Pro Arg Gly Pro Phe Tyr Leu His Cys Ile | | |
| 500 | 505 | 510 |
| Glu Val Gly Ala Trp Arg Thr Ile Thr Thr Pro Ala Ser Phe Ser Ala | | |
| 515 | 520 | 525 |
| Phe Pro Pro Pro Ala Ala Pro His Glu Val Cys Trp Pro Gly Pro Xaa | | |
| 530 | 535 | 540 |
| Gly Leu Ala Pro Asp Ile Leu Ala Pro Gln Thr Ser Thr Pro Ser Leu | | |
| 545 | 550 | 555 |
| Thr Ser Ser Trp Tyr Phe Ala Thr Glu Ser Ser His Phe Tyr Ser Ala | | |
| 565 | 570 | 575 |
| Ser Ala Ile Tyr Gly Gly Ser Ala Ser Tyr Ser Ala Tyr Ser Cys Ser | | |
| 580 | 585 | 590 |
| Gln Leu Pro Thr Cys Gly Asp Gln Val Tyr Ser Val Arg Arg Arg Gln | | |
| 595 | 600 | 605 |
| Lys Pro Ser Asp Arg Ala Asp Ser Arg Arg Ser Trp His Glu Glu Ser | | |
| 610 | 615 | 620 |
| Pro Phe Glu Lys Gln Phe Lys Arg Arg Ser Cys Gln Met Glu Phe Gly | | |
| 625 | 630 | 635 |
| Glu Ser Ile Met Ser Glu Asn Arg Ser Arg Glu Glu Leu Gly Lys Val | | |
| 645 | 650 | 655 |
| Gly Ser Gln Ser Ser Phe Ser Gly Ser Met Glu Ile Ile Glu Val Ser | | |
| 660 | 665 | 670 |
| | | 672 |

<210> 1260
<211> 260
<212>Amino acid
<213> Homo sapiens

<400> 1260
Ala Ser Ser Ser Lys Arg Val Ser Arg Gln Lys Met Leu Gln Leu Trp
1 5 10 15
Lys Leu Val Leu Leu Cys Gly Val Leu Thr Gly Thr Ser Glu Ser Leu
20 25 30
Leu Asp Asn Leu Gly Asn Asp Leu Ser Asn Val Val Asp Lys Leu Glu
35 40 45
Pro Val Leu His Glu Gly Leu Glu Thr Val Asp Asn Thr Leu Lys Gly
50 55 60
Ile Leu Glu Lys Leu Lys Val Asp Leu Gly Val Leu Gln Lys Ser Ser
65 70 75 80
Ala Trp Gln Leu Ala Lys Gln Lys Ala Gln Glu Ala Glu Lys Leu Leu
85 90 95
Asn Asn Val Ile Ser Lys Leu Leu Pro Thr Asn Thr Asp Ile Phe Gly
100 105 110
Leu Lys Ile Ser Asn Ser Leu Ile Leu Asp Val Lys Ala Glu Pro Ile
115 120 125
Asp Asp Gly Lys Gly Leu Asn Leu Ser Phe Pro Val Thr Ala Asn Val
130 135 140
Thr Glu Ala Gly Pro Ile Ile Asp Gln Ile Ile Asn Leu Arg Ala Ser
145 150 155 160
Leu Asp Leu Leu Thr Ala Val Thr Ile Glu Thr Asp Pro Gln Thr His
165 170 175
His Pro Val Ala Gly Leu Gly Glu Cys Ala Arg Asp Pro Thr Ser Ile
180 185 190
Ser Leu Cys Leu Leu Asp Lys His Ser Gln Ile Ile Asn Lys Phe Val
195 200 205
Asn Ser Val Ile Asn Thr Leu Lys Ser Thr Val Ser Ser Leu Leu Gln
210 215 220
Lys Glu Ile Cys Pro Leu Ile Arg Ile Phe Ile His Ser Leu Asp Val
225 230 235 240
Asn Val Ile Gln Gln Val Val Asp Asn Pro Gln His Lys Thr Gln Leu
245 250 255
Gln Thr Leu Ile
260

<210> 1261
<211> 278
<212>Amino acid
<213> Homo sapiens

<400> 1261
Cys Ser Leu Arg Arg Pro Arg Ser Ala Ala Glu Pro Asp Ala Asp His
1 5 10 15
Val Pro Leu Leu Gly Leu Leu Arg Leu Gln Leu Arg Ala Ala Arg Gln
20 25 30
Pro Gly Ala Met Arg Pro Gln Gly Pro Ala Ala Ser Pro Gln Arg Leu

| | | | |
|---|-----|-----|-----|
| 35 | 40 | 45 | |
| Arg Gly Leu Leu Leu Leu Leu Leu Gln Leu Pro Ala Pro Ser Ser | | | |
| 50 | 55 | 60 | |
| Ala Ser Glu Ile Pro Lys Gly Lys Gln Lys Ala Gln Leu Arg Gln Arg | | | |
| 65 | 70 | 75 | 80 |
| Glu Val Val Asp Leu Tyr Asn Gly Met Cys Leu Gln Gly Pro Ala Gly | | | |
| 85 | 90 | 95 | |
| Val Pro Gly Arg Asp Gly Ser Pro Gly Ala Asn Gly Ile Pro Gly Thr | | | |
| 100 | 105 | 110 | |
| Pro Gly Ile Pro Gly Arg Asp Gly Phe Lys Gly Glu Lys Gly Glu Cys | | | |
| 115 | 120 | 125 | |
| Leu Arg Glu Ser Phe Glu Glu Ser Trp Thr Pro Asn Tyr Lys Gln Cys | | | |
| 130 | 135 | 140 | |
| Ser Trp Ser Ser Leu Asn Tyr Gly Ile Asp Leu Gly Lys Ile Ala Glu | | | |
| 145 | 150 | 155 | 160 |
| Cys Thr Phe Thr Lys Met Arg Ser Asn Ser Ala Leu Arg Val Leu Phe | | | |
| 165 | 170 | 175 | |
| Ser Gly Ser Leu Arg Leu Lys Cys Arg Asn Ala Cys Cys Gln Arg Trp | | | |
| 180 | 185 | 190 | |
| Tyr Phe Thr Phe Asn Gly Ala Glu Cys Ser Gly Pro Leu Pro Ile Glu | | | |
| 195 | 200 | 205 | |
| Ala Ile Ile Tyr Leu Asp Gln Gly Ser Pro Glu Met Asn Ser Thr Ile | | | |
| 210 | 215 | 220 | |
| Asn Ile His Arg Thr Ser Ser Val Glu Gly Leu Cys Glu Gly Ile Gly | | | |
| 225 | 230 | 235 | 240 |
| Ala Gly Leu Val Asp Val Ala Ile Trp Val Gly Thr Cys Ser Asp Tyr | | | |
| 245 | 250 | 255 | |
| Pro Lys Gly Asp Ala Ser Thr Gly Trp Asn Ser Val Ser Arg Ile Ile | | | |
| 260 | 265 | 270 | |
| Ile Glu Glu Leu Pro Lys | | | |
| 275 | 278 | | |

<210> 1262
 <211> 362
 <212>Amino acid
 <213> Homo sapiens

| |
|---|
| <400> 1262 |
| Met His Ser Ala Met Leu Gly Thr Arg Val Asn Leu Ser Val Ser Asp |
| 1 5 10 15 |
| Phe Trp Arg Val Met Met Arg Val Cys Trp Leu Val Arg Gln Asp Ser |
| 20 25 30 |
| Arg His Gln Arg Ile Arg Leu Pro His Leu Glu Ala Val Val Ile Gly |
| 35 40 45 |
| Arg Gly Pro Glu Thr Lys Ile Thr Asp Lys Lys Cys Ser Arg Gln Gln |
| 50 55 60 |
| Val Gln Leu Lys Ala Glu Cys Asn Lys Gly Tyr Val Lys Val Lys Gln |
| 65 70 75 80 |
| Val Gly Val Asn Pro Thr Ser Ile Asp Ser Val Val Ile Gly Lys Asp |
| 85 90 95 |
| Gln Glu Val Lys Leu Gln Pro Gly Gln Val Leu His Met Val Asn Glu |
| 100 105 110 |
| Leu Tyr Pro Tyr Ile Val Glu Phe Glu Glu Ala Lys Asn Pro Gly |
| 115 120 125 |
| Leu Glu Thr His Arg Lys Arg Lys Arg Ser Gly Asn Ser Asp Ser Ile |
| 130 135 140 |
| Glu Arg Asp Ala Ala Gln Glu Ala Glu Ala Gly Thr Gly Leu Glu Pro |
| 145 150 155 160 |
| Gly Ser Asn Ser Gly Gln Cys Ser Val Pro Leu Lys Lys Gly Lys Asp |

| | | | |
|---|-----|-----|-----|
| | 165 | 170 | |
| Ala Pro Ile Lys Lys Glu Ser Leu Gly His Trp Ser Gln Gly Leu Lys | 180 | 185 | 175 |
| | | | 190 |
| Ile Ser Met Gln Asp Pro Lys Met Gln Val Tyr Lys Asp Glu Gln Val | 195 | 200 | 205 |
| | | | 205 |
| Val Val Ile Lys Asp Lys Tyr Pro Lys Ala Arg Tyr His Trp Leu Val | 210 | 215 | 220 |
| | | | 220 |
| Leu Pro Trp Thr Ser Ile Ser Ser Leu Lys Ala Val Ala Arg Glu His | 225 | 230 | 235 |
| | | | 240 |
| Leu Glu Leu Leu Lys His Met His Thr Val Gly Glu Lys Val Ile Val | 245 | 250 | 255 |
| | | | 255 |
| Asp Phe Ala Gly Ser Ser Lys Leu Arg Phe Arg Leu Gly Tyr His Ala | 260 | 265 | 270 |
| | | | 270 |
| Ile Pro Ser Met Ser His Val His Leu His Val Ile Ser Gln Asp Phe | 275 | 280 | 285 |
| | | | 285 |
| Asp Ser Pro Cys Leu Lys Asn Lys Lys His Trp Asn Ser Phe Asn Thr | 290 | 295 | 300 |
| | | | 300 |
| Glu Tyr Phe Leu Glu Ser Gln Ala Val Ile Glu Met Val Gln Glu Ala | 305 | 310 | 315 |
| | | | 320 |
| Gly Arg Val Thr Val Arg Asp Gly Met Pro Glu Leu Leu Lys Leu Pro | 325 | 330 | 335 |
| | | | 335 |
| Leu Arg Cys His Glu Cys Gln Gln Leu Leu Pro Ser Ile Pro Gln Leu | 340 | 345 | 350 |
| | | | 350 |
| Lys Glu His Leu Arg Lys His Trp Thr Gln | 355 | 360 | 362 |

<210> 1263
 <211> 618
 <212>Amino acid
 <213> Homo sapiens

 <220>
 <221> misc_feature
 <222> (1)...(618)
 <223> X = any amino acid or stop code

| | | | | |
|---|------------|-----|-----|-----|
| | <400> 1263 | | | |
| Asp Met Ser Asp Thr Ser Glu Ser Gly Ala Gly Leu Thr Arg Phe Gln | 1 | 5 | 10 | 15 |
| | | | | |
| Ala Glu Ala Ser Glu Lys Asp Ser Ser Ser Met Met Gln Thr Leu Leu | 20 | 25 | 30 | |
| | | | | |
| Thr Val Thr Gln Asn Val Glu Val Pro Glu Thr Pro Lys Ala Ser Lys | 35 | 40 | 45 | |
| | | | | |
| Ala Leu Glu Val Ser Glu Asp Val Lys Val Ser Lys Ala Ser Gly Val | 50 | 55 | 60 | |
| | | | | |
| Ser Lys Ala Thr Glu Val Ser Lys Thr Pro Glu Ala Arg Glu Ala Pro | 65 | 70 | 75 | 80 |
| | | | | |
| Ala Thr Gln Ala Ser Ser Thr Thr Gln Leu Thr Asp Thr Gln Val Leu | 85 | 90 | 95 | |
| | | | | |
| Ala Ala Glu Asn Lys Ser Leu Ala Ala Asp Thr Lys Lys Gln Asn Ala | 100 | 105 | 110 | |
| | | | | |
| Asp Pro Gln Ala Val Thr Met Pro Ala Thr Glu Thr Lys Lys Val Ser | 115 | 120 | 125 | |
| | | | | |
| His Val Ala Asp Thr Lys Val Asn Thr Lys Ala Gln Glu Thr Glu Ala | 130 | 135 | 140 | |
| | | | | |
| Ala Pro Ser Gln Ala Pro Ala Asp Glu Pro Glu Pro Glu Ser Ala Ala | 145 | 150 | 155 | 160 |
| | | | | |
| Ala Gln Ser Gln Glu Asn Gln Asp Thr Arg Pro Lys Val Lys Ala Lys | 165 | 170 | 175 | |

Lys Ala Arg Lys Val Lys His Leu Asp Gly Glu Glu Asp Gly Ser Ser
 180 185 190
 Asp Gln Ser'Gln Ala Ser Gly Thr Thr Gly Gly Arg Arg Val Ser Lys
 195 200 205
 Ala Leu Met Ala Ser Met Ala Arg Arg Ala Ser Arg Gly Pro Ile Ala
 210 215 220
 Phe Trp Ala Arg Arg Ala Ser Arg Thr Arg Leu Ala Cys Phe Gly Pro
 225 230 235 240
 Gly Glu Pro Leu Leu Ser Pro Trp Arg Ser Pro Lys Ala Arg Arg Gln
 245 250 255
 Arg Gly Phe Ala Val Arg Val Ala Lys Phe Gln Ser Ser Gln Glu Pro
 260 265 270
 Glu Ala Pro Pro Pro Trp Asp Val Ala Leu Leu Gln'Gly Arg Ala Asn
 275 280 285
 Asp Leu Val Lys Tyr Leu Leu Ala Lys Asp Gln Thr Lys Ile Pro Ile
 290 295 300
 Lys Arg Ser Asp Met Leu Lys Asp Ile Ile Lys Glu Tyr Thr Asp Val
 305 310 315 320
 Tyr Pro Glu Ile Ile Glu Arg Ala Gly Tyr Ser Leu Glu Lys Val Phe
 325 330 335
 Gly Ile Gln Leu Lys Glu Ile Asp Lys Asn Asp His Leu Tyr Ile Leu
 340 345 350
 Leu Ser Thr Leu Glu Pro Thr Asp Ala Gly Ile Leu Gly Thr Thr Lys
 355 360 365
 Asp Ser Pro Lys Leu Gly Leu Leu Met Val Leu Leu Ser Ile Ile Phe
 370 375 380
 Met Asn Gly Asn Arg Ser Ser Glu Ala Val Ile Trp Glu Val Leu Arg
 385 390 395 400
 Arg Ser Leu Gly Leu Arg Leu Gly Ile His His Ser Leu Leu Gly Asp
 405 410 415
 Val Lys Lys Leu Ile Thr Asp Glu Val Val Lys Gln Lys Tyr Leu Asp
 420 425 430
 Tyr Ala Arg Val Pro His Ser Asn Ser Pro Glu Tyr Glu Phe Phe Trp
 435 440 445
 Gly Leu Arg Ser Tyr Tyr Glu Asp Gln Gln Arg Xaa Lys Ser Phe Lys
 450 455 460
 Phe Ala Cys Lys Val Gln Lys Lys Asp Pro Lys Glu Trp Ala Ala Gln
 465 470 475 480
 Ser Pro Pro Gly Lys Ala Arg Glu Arg Met Glu Ala Asp Leu Lys Ala
 485 490 495
 Ala Ser Xaa Gly Ser Pro Trp Lys Pro Arg Leu Arg Ala Glu Ile Lys
 500 505 510
 Ala Arg Met Gly Ile Gly Leu Gly Ser Glu Asn Ala Ala Gly Pro Cys
 515 520 525
 Asn Trp Asp Glu Ala Asp Ile Gly Pro Trp Ala Lys Ala Arg Ile Gln
 530 535 540
 Ala Gly Ala Glu Ala Lys Ala Lys Ala Gln Glu Ser Gly Ser Ala Ser
 545 550 555 560
 Thr Gly Ala Ser Thr Ser Thr Asn Asn Ser Ala Ser Ala Ser Ala Ser
 565 570 575
 Thr Ser Gly Gly Phe Ser Ala Gly Ala Ser Leu Thr Ala Thr Leu Thr
 580 585 590
 Phe Gly Leu Phe Ala Gly Leu Gly Gly Ala Gly Ala Ser Thr Ser Gly
 595 600 605
 Ser Ser Gly Ala Cys Gly Phe Ser Tyr Lys
 610 615 618

<210> 1264
 <211> 464
 <212>Amino acid
 <213> Homo sapiens

<220>

<221> misc_feature
<222> (1)...(464)
<223> X = any amino acid or stop code

<400> 1264
Ala Arg Pro Pro Val Cys Thr Gly Ser Thr Met Ser Leu Thr Val Val
1 5 10 15
Ser Met Ala Cys Val Gly Phe Phe Leu Leu Gln Gly Ala Trp Pro Leu
20 25 30
Met Gly Gly Gln Asp Lys Pro Phe Leu Ser Ala Arg Pro Ser Thr Val
35 40 45
Val Pro Arg Gly Gly His Val Ala Leu Gln Cys His Tyr Arg Arg Gly
50 55 60
Phe Asn Asn Phe Met Leu Tyr Lys Glu Asp Arg Ser His Val Pro Ile
65 70 75 80
Phe His Gly Arg Ile Phe Gln Glu Ser Phe Ile Met Gly Pro Val Thr
85 90 95
Pro Ala His Ala Gly Thr Tyr Arg Cys Arg Gly Ser Arg Pro His Ser
100 105 110
Leu Thr Gly Trp Ser Ala Pro Ser Asn Pro Leu Val Ile Met Val Thr
115 120 125
Gly Asn His Arg Lys Pro Ser Leu Leu Ala His Pro Gly Pro Leu Leu
130 135 140
Lys Ser Gly Glu Thr Val Ile Leu Gln Cys Trp Ser Asp Ile Met Phe
145 150 155 160
Glu His Phe Phe Leu His Lys Glu Gly Ile Ser Lys Asp Pro Ser Arg
165 170 175
Leu Val Gly Gln Ile His Asp Gly Val Ser Lys Ala Asn Phe Ser Ile
180 185 190
Gly Pro Met Met Leu Ala Leu Ala Gly Thr Tyr Arg Cys Tyr Gly Ser
195 200 205
Val Thr His Thr Pro Tyr Gln Leu Ser Ala Pro Ser Asp Pro Leu Asp
210 215 220
Ile Val Val Thr Gly Pro Tyr Glu Lys Pro Ser Leu Ser Ala Gln Pro
225 230 235 240
Gly Pro Lys Val Gln Ala Gly Glu Ser Val Thr Leu Ser Cys Ser Ser
245 250 255
Arg Ser Ser Tyr Asp Met Tyr His Leu Ser Arg Glu Gly Ala His
260 265 270
Glu Arg Arg Leu Pro Ala Val Arg Lys Val Asn Arg Thr Phe Gln Ala
275 280 285
Asp Phe Pro Leu Gly Pro Ala Thr His Gly Gly Thr Tyr Arg Cys Phe
290 295 300
Gly Ser Phe Arg His Ser Pro Tyr Glu Trp Ser Asp Pro Ser Asp Pro
305 310 315 320
Leu Leu Val Ser Val Thr Gly Asn Pro Ser Ser Ser Trp Pro Ser Pro
325 330 335
Thr Glu Pro Ser Ser Lys Ser Gly Asn Leu Arg His Leu His Ile Leu
340 345 350
Ile Gly Thr Ser Val Val Lys Ile Pro Phe Thr Ile Leu Leu Phe Phe
355 360 365
Leu Leu His Arg Trp Cys Ser Asn Lys Lys Asn Ala Ala Val Met Asp
370 375 380
Gln Glu Pro Ala Gly Asn Arg Val Asn Ser Glu Asp Ser Asp Glu Gln
385 390 395 400
Asp His Gln Glu Val Ser Tyr Pro Xaa Leu Glu His Cys Val Phe Thr
405 410 415
Gln Arg Lys Ile Thr Arg Pro Ser Gln Arg Pro Lys Thr Pro Pro Thr
420 425 430
Asp Thr Ser Met Tyr Ile Glu Leu Pro Asn Ala Glu Pro Arg Ser Lys

| | | |
|---|-----|-----|
| 435 | 440 | 445 |
| Val Val Phe Cys Pro Arg Ala Pro Gln Ser Gly Leu Glu Gly Ile Phe | | |
| 450 | 455 | 460 |
| | | 464 |

<210> 1265
<211> 1879
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1879)
<223> X = any amino acid or stop code

| | | | |
|---|-----|-----|-----|
| <400> 1265 | | | |
| Leu His Asn Leu Arg Arg Glu Tyr Phe Ser Gly Leu Ile Tyr Thr Tyr | | | |
| 1 | 5 | 10 | 15 |
| Ser Gly Leu Phe Cys Val Val Val Asn Pro Tyr Lys His Leu Pro Ile | | | |
| 20 | 25 | 30 | |
| Tyr Ser Glu Lys Ile Val Asp Met Tyr Lys Gly Lys Lys Arg His Glu | | | |
| 35 | 40 | 45 | |
| Met Pro Pro His Ile Tyr Ala Ile Ala Asp Thr Ala Tyr Arg Ser Met | | | |
| 50 | 55 | 60 | |
| Leu Gln Asp Arg Glu Asp Gln Ser Ile Leu Cys Thr Gly Glu Ser Gly | | | |
| 65 | 70 | 75 | 80 |
| Ala Gly Lys Thr Glu Asn Thr Lys Lys Val Ile Gln Tyr Leu Ala Val | | | |
| 85 | 90 | 95 | |
| Val Ala Ser Ser His Lys Gly Lys Lys Asp Thr Ser Ile Thr Gly Glu | | | |
| 100 | 105 | 110 | |
| Leu Glu Lys Gln Ile Leu Gln Ala Asn Pro Ile Leu Glu Ala Phe Gly | | | |
| 115 | 120 | 125 | |
| Asn Ala Lys Thr Val Lys Asn Asp Asn Ser Ser Arg Phe Gly Lys Phe | | | |
| 130 | 135 | 140 | |
| Ile Arg Ile Asn Phe Asp Val Thr Gly Tyr Ile Val Gly Ala Asn Ile | | | |
| 145 | 150 | 155 | 160 |
| Glu Thr Tyr Leu Leu Glu Lys Ser Arg Ala Ile Arg Gln Ala Arg Asp | | | |
| 165 | 170 | 175 | |
| Glu Arg Thr Phe His Ile Phe Tyr Tyr Met Ile Ala Gly Ala Lys Glu | | | |
| 180 | 185 | 190 | |
| Lys Met Arg Ser Asp Leu Leu Leu Glu Gly Phe Asn Asn Tyr Thr Phe | | | |
| 195 | 200 | 205 | |
| Leu Ser Asn Gly Phe Val Pro Ile Pro Ala Ala Gln Asp Asp Glu Met | | | |
| 210 | 215 | 220 | |
| Phe Gln Glu Thr Val Glu Ala Met Ala Ile Met Gly Phe Ser Glu Glu | | | |
| 225 | 230 | 235 | 240 |
| Glu Gln Leu Ser Ile Leu Lys Val Val Ser Ser Val Val Gln Leu Glu | | | |
| 245 | 250 | 255 | |
| Asn Ile Val Phe Lys Lys Glu Arg Asn Thr Asp Gln Ala Ser Met Pro | | | |
| 260 | 265 | 270 | |
| Asp Asn Thr Ala Ala Gln Lys Val Cys His Leu Met Gly Ile Asn Val | | | |
| 275 | 280 | 285 | |
| Thr Asp Phe Thr Arg Ser Ile Leu Thr Pro Arg Ile Lys Val Gly Arg | | | |
| 290 | 295 | 300 | |
| Asp Val Val Gln Lys Ala Gln Thr Lys Glu Gln Ala Asp Phe Ala Val | | | |
| 305 | 310 | 315 | 320 |
| Glu Ala Leu Ala Lys Ala Thr Tyr Glu Arg Leu Phe Arg Trp Ile Leu | | | |
| 325 | 330 | 335 | |

Thr Arg Val Asn Lys Ala Leu Asp Lys Thr His Arg Gln Gly Ala Ser
 340 345 350
 Phe Leu Gly Ile Leu Asp Ile Ala Gly Phe Glu Ile Phe Glu Val Asn
 355 360 365
 Ser Phe Glu Gln Leu Cys Ile Asn Tyr Thr Asn Glu Lys Leu Gln Gln
 370 375 380
 Leu Phe Asn His Thr Met Phe Ile Leu Glu Gln Glu Glu Tyr Gln Arg
 385 390 395 400
 Glu Gly Ile Glu Glu Trp Asn Phe Ile Asp Phe Gly Leu Asp Leu Gln Pro
 405 410 415
 Cys Ile Glu Leu Ile Glu Arg Pro Asn Asn Pro Pro Gly Val Leu Ala
 420 425 430
 Leu Leu Asp Glu Glu Cys Trp Phe Pro Lys Ala Thr Asp Lys Ser Phe
 435 440 445
 Val Glu Lys Leu Cys Thr Glu Gln Gly Ser His Pro Lys Phe Gln Lys
 450 455 460
 Pro Lys Gln Leu Lys Asp Lys Thr Glu Phe Ser Ile Ile His Tyr Ala
 465 470 475 480
 Gly Lys Val Asp Tyr Asn Ala Ser Ala Trp Leu Thr Lys Asn Met Asp
 485 490 495
 Pro Leu Asn Asp Asn Val Thr Ser Leu Leu Asn Ala Ser Ser Asp Lys
 500 505 510
 Phe Val Ala Asp Leu Trp Lys Asp Val Asp Arg Ile Val Gly Leu Asp
 515 520 525
 Gln Met Ala Lys Met Thr Glu Ser Ser Leu Pro Ser Ala Ser Lys Thr
 530 535 540
 Lys Lys Gly Met Phe Arg Thr Val Gly Gln Leu Tyr Lys Glu Gln Leu
 545 550 555 560
 Gly Lys Leu Met Thr Thr Leu Arg Asn Thr Thr Pro Asn Phe Val Arg
 565 570 575
 Cys Ile Ile Pro Asn His Glu Lys Arg Ser Gly Lys Leu Asp Ala Phe
 580 585 590
 Leu Val Leu Glu Gln Leu Arg Cys Asn Gly Val Leu Glu Gly Ile Arg
 595 600 605
 Ile Cys Arg Gln Gly Phe Pro Asn Arg Ile Val Phe Gln Glu Phe Arg
 610 615 620
 Gln Arg Tyr Glu Ile Leu Ala Ala Asn Ala Ile Pro Lys Gly Phe Met
 625 630 635 640
 Asp Gly Lys Gln Ala Cys Ile Leu Met Ile Lys Ala Leu Glu Leu Asp
 645 650 655
 Pro Asn Leu Tyr Arg Ile Gly Gln Ser Lys Ile Phe Phe Arg Thr Gly
 660 665 670
 Val Leu Ala His Leu Glu Glu Glu Arg Asp Leu Lys Ile Thr Asp Val
 675 680 685
 Ile Met Ala Phe Gln Ala Met Cys Arg Gly Tyr Leu Ala Arg Lys Ala
 690 695 700
 Phe Ala Lys Arg Gln Gln Leu Thr Ala Met Lys Val Ile Gln Arg
 705 710 715 720
 Asn Cys Ala Ala Tyr Ile Lys Leu Arg Asn Trp Gln Trp Cys Arg Leu
 725 730 735
 Phe Thr Lys Val Xaa Pro Leu Leu Gln Val Thr Arg Gln Glu Xaa Glu
 740 745 750
 Met Gln Ala Lys Glu Asp Glu Leu Gln Lys Thr Lys Glu Arg Gln Gln
 755 760 765
 Lys Ala Glu Asn Glu Leu Lys Glu Leu Glu Gln Lys His Ser Gln Leu
 770 775 780
 Thr Glu Glu Lys Asn Leu Leu Gln Glu Gln Leu Gln Ala Glu Thr Glu
 785 790 795 800
 Leu Tyr Ala Glu Ala Glu Glu Met Arg Val Arg Leu Ala Ala Lys Lys
 805 810 815
 Gln Glu Leu Glu Ile Leu His Glu Met Glu Ala Arg Leu Glu Glu
 820 825 830
 Glu Glu Asp Arg Gly Gln Gln Leu Gln Ala Glu Arg Lys Lys Met Ala
 835 840 845

Gln Gln Met Leu Asp Leu Glu Glu Gln Leu Glu Glu Glu Ala Ala
 850 855 860
 Arg Gln Lys Leu Gln Leu Glu Lys Val Thr Ala Glu Ala Lys Ile Lys
 865 870 875 880
 Lys Leu Glu Asp Glu Ile Leu Val Met Asp Asp Gln Asn Asn Lys Leu
 885 890 895
 Ser Lys Glu Arg Lys Leu Leu Glu Glu Arg Ile Ser Asp Leu Thr Thr
 900 905 910
 Asn Leu Ala Glu Glu Glu Lys Ala Lys Asn Leu Thr Lys Leu Lys
 915 920 925
 Asn Lys His Glu Ser Met Ile Ser Glu Leu Glu Val Arg Leu Lys Lys
 930 935 940
 Glu Glu Lys Ser Arg Gln Glu Leu Glu Lys Leu Lys Arg Lys Leu Glu
 945 950 955 960
 Gly Asp Ala Ser Asp Phe His Glu Gln Ile Ala Asp Leu Gln Ala Gln
 965 970 975
 Ile Ala Glu Leu Lys Met Gln Leu Ala Lys Lys Glu Glu Glu Leu Glu
 980 985 990
 Ala Ala Ala Arg Leu Asp Asp Glu Ile Ala Gln Lys Asn Asn Ala
 995 1000 1005
 Leu Lys Lys Ile Arg Glu Leu Glu Gly His Ile Ser Asp Leu Gln Glu
 1010 1015 1020
 Asp Leu Asp Ser Glu Arg Ala Ala Arg Asn Lys Ala Glu Lys Gln Lys
 1025 1030 1035 1040
 Arg Asp Leu Gly Glu Glu Leu Glu Ala Leu Lys Thr Glu Leu Glu Asp
 1045 1050 1055
 Thr Leu Asp Ser Thr Ala Thr Gln Gln Glu Leu Arg Ala Lys Arg Glu
 1060 1065 1070
 Gln Glu Val Thr Val Leu Lys Arg Ala Leu Asn Glu Glu Thr Arg Ser
 1075 1080 1085
 His Glu Ala Gln Val Gln Glu Met Arg Gln Lys His Ala Gln Ala Val
 1090 1095 1100
 Gln Ser Leu Thr Glu Gln Leu Glu Gln Xaa Lys Arg Ala Lys Ala Asn
 1105 1110 1115 1120
 Leu Asp Lys Asn Lys Glu Thr Leu Glu Lys Glu Asn Thr Asp Leu Ala
 1125 1130 1135
 Gly Glu Leu Arg Val Leu Gly Gln Ala Lys Gln Glu Val Glu His Arg
 1140 1145 1150
 Met Lys Lys Leu Gln Ala Gln Val Gln Glu Leu Gln Ser Lys Cys Ser
 1155 1160 1165
 Asp Gly Glu Arg Ala Arg Ala Glu Leu Asn Asp Lys Val His Lys Leu
 1170 1175 1180
 Gln Asn Glu Val Glu Ser Val Thr Gly Met Leu Asn Glu Ala Glu Gly
 1185 1190 1195 1200
 Lys Ala Ile Lys Leu Ala Lys Asp Val Ala Ser Leu Ser Ser Gln Leu
 1205 1210 1215
 Gln Asp Thr Gln Glu Leu Leu Gln Glu Ser Arg Gln Lys Leu Asn
 1220 1225 1230
 Val Ser Thr Ser Leu Arg Gln Leu Glu Glu Arg Asn Ser Leu Gln
 1235 1240 1245
 Asp Gln Leu Asp Glu Glu Met Glu Ala Lys Gln Asn Leu Glu Arg His
 1250 1255 1260
 Ile Ser Thr Leu Asn Ile Gln Leu Ser Asp Ser Lys Lys Lys Leu Gln
 1265 1270 1275 1280
 Asp Phe Ala Ser Thr Val Glu Ala Leu Glu Glu Gly Lys Lys Arg Phe
 1285 1290 1295
 Gln Lys Glu Ile Glu Asn Leu Thr Gln Gln Tyr Glu Glu Lys Ala Ala
 1300 1305 1310
 Ala Tyr Asp Lys Leu Glu Lys Thr Lys Asn Arg Leu Gln Gln Glu Leu
 1315 1320 1325
 Asp Asp Leu Val Val Asp Leu Asp Asn Gln Arg Gln Leu Val Ser Asn
 1330 1335 1340
 Leu Glu Lys Lys Gln Arg Lys Phe Asp Gln Leu Leu Ala Glu Glu Lys
 1345 1350 1355 1360

Asn Ile Ser Ser Lys Tyr Ala Asp Glu Arg Asp Arg Val Glu Ala Glu
 1365 1370 1375
 Ala Arg Glu Lys Glu Thr Lys Ala Leu Ser Leu Ala Arg Ala Leu Glu
 1380 1385 1390
 Glu Ala Leu Glu Ala Lys Glu Glu Leu Glu Arg Thr Asn Lys Met Leu
 1395 1400 1405
 Lys Ala Glu Met Gly Arg Pro Gly Ser Ala Ser Lys Asp Asp Val Gly
 1410 1415 1420
 Gln Glu Leu Ser His Asp Leu Glu Lys Ser Lys Arg Ala Leu Gly Asp
 1425 1430 1435 1440
 Pro Arg Leu Glu Glu Met Lys Thr Gln Leu Glu Leu Gly Arg Thr
 1445 1450 1455
 Glu Leu Ala Ser Pro Arg Arg Asp Ala Lys Leu Arg Leu Glu Val Asn
 1460 1465 1470
 Met Gln Ala Pro Ser Arg Ala Ser Phe Glu Arg Asp Leu Gln Ala Arg
 1475 1480 1485
 Thr Glu Gln Asn Glu Glu Ser Arg Arg His Leu Gln Arg Gln Leu His
 1490 1495 1500
 Glu Tyr Glu Thr Glu Leu Glu Asp Glu Arg Lys Gln Arg Ala Leu Ala
 1505 1510 1515 1520
 Ala Ala Ala Lys Ile Lys Leu Gly Trp Asp Pro Val Arg Thr Leu Asp
 1525 1530 1535
 Leu Xaa Ala Asp Ser Ala Ile Lys Gly Arg Gly Gly Lys Ala Ile Lys
 1540 1545 1550
 Gln Leu Arg Lys Leu Gln Ala Gln Met Lys Asp Phe Gln Arg Glu Leu
 1555 1560 1565
 Glu Asp Ala Arg Ala Ser Arg Asp Glu Ile Phe Ala Thr Ala Lys Glu
 1570 1575 1580
 Asn Gln Lys Lys Ala Lys Ser Leu Glu Ala Asp Leu Met Gln Leu Gln
 1585 1590 1595 1600
 Glu Asp Leu Ala Ala Glu Glu Gly Arg Lys Gln Ala Asp Leu Glu
 1605 1610 1615
 Lys Glu Glu Leu Ala Glu Glu Leu Ala Ser Ser Leu Ser Gly Arg Asn
 1620 1625 1630
 Ala Leu Gln Asp Glu Lys Arg Arg Leu Glu Ala Arg Ile Ala Gln Leu
 1635 1640 1645
 Glu Glu Glu Leu Glu Glu Gln Gln Asn Met Glu Ala Met Ser Asp
 1650 1655 1660
 Arg Val Arg Lys Ala Thr Gln Ala Glu Gln Leu Ser Asn Glu Leu
 1665 1670 1675 1680
 Ala Thr Glu Arg Ser Thr Ala Gln Lys Asn Glu Ser Ala Arg Gln Gln
 1685 1690 1695
 Leu Glu Arg Gln Asn Lys Glu Leu Arg Ser Lys Leu His Glu Met Glu
 1700 1705 1710
 Gly Ala Val Lys Ser Lys Phe Lys Ser Thr Ile Ala Ala Leu Glu Ala
 1715 1720 1725
 Lys Ile Ala Gln Leu Glu Glu Gln Val Glu Gln Ala Arg Glu Lys
 1730 1735 1740
 Gln Ala Ala Thr Lys Ser Leu Lys Gln Lys Asp Lys Lys Leu Lys Glu
 1745 1750 1755 1760
 Ile Leu Leu Glu Val Glu Asp Glu Arg Lys Met Ala Glu Gln Tyr Lys
 1765 1770 1775
 Glu Gln Ala Lys Gly Asn Ala Arg Val Lys Gln Leu Lys Arg Gln
 1780 1785 1790
 Leu Glu Glu Ala Glu Glu Glu Ser Gln Arg Ile Asn Ala Asn Arg Arg
 1795 1800 1805
 Lys Leu Gln Arg Glu Leu Asp Glu Ala Thr Glu Ser Asn Glu Ala Met
 1810 1815 1820
 Gly Arg Glu Val Asn Ala Leu Lys Ser Lys Leu Arg Arg Gly Asn Glu
 1825 1830 1835 1840
 Thr Ser Phe Val Pro Ser Arg Arg Ser Gly Gly Arg Arg Val Ile Glu
 1845 1850 1855
 Asn Ala Asp Gly Ser Glu Glu Thr Asp Thr Arg Asp Ala Asp Phe
 1860 1865 1870

| | | | | | | |
|------|-----|-----|-----|-----|-----|------|
| Asn | Gly | Thr | Lys | Ala | Ser | Glu |
| 1875 | | | | | | 1879 |

<210> 1266
<211> 257
<212>Amino acid
<213> Homo sapiens

<400> 1266
Lys Leu His Phe Ala Lys Ser Leu Asn Ser Glu Leu Ser Cys Ser Thr
1 5 10 15
Arg Glu Ala Met Gln Asp Glu Asp Gly Tyr Ile Thr Leu Asn Ile Lys
20 25 30
Thr Arg Lys Pro Ala Leu Val Ser Val Gly Pro Ala Ser Ser Ser Trp
35 40 45
Trp Arg Val Met Ala Leu Ile Leu Leu Ile Cys Val Gly Met Val
50 55 60
Val Gly Leu Val Ala Leu Gly Ile Trp Ser Val Met Gln Arg Asn Tyr
65 70 75 80
Leu Gln Asp Glu Asn Glu Asn Arg Thr Gly Thr Leu Gln Gln Leu Ala
85 90 95
Lys Arg Phe Cys Gln Tyr Val Val Lys Gln Ser Glu Leu Lys Gly Thr
100 105 110
Phe Lys Gly His Lys Cys Ser Pro Cys Asp Thr Asn Trp Arg Tyr Tyr
115 120 125
Gly Asp Ser Cys Tyr Gly Phe Arg His Asn Leu Thr Trp Glu Glu
130 135 140
Ser Lys Gln Tyr Cys Thr Asp Met Asn Ala Thr Leu Leu Lys Ile Asp
145 150 155 160
Asn Arg Asn Ile Val Glu Tyr Ile Lys Ala Arg Thr His Leu Ile Arg
165 170 175
Trp Val Gly Leu Ser Arg Gln Lys Ser Asn Glu Val Trp Lys Trp Glu
180 185 190
Asp Gly Ser Val Ile Ser Glu Asn Met Phe Glu Phe Leu Glu Asp Gly
195 200 205
Lys Gly Asn Met Asn Cys Ala Tyr Phe His Asn Gly Lys Met His Pro
210 215 220
Thr Phe Cys Glu Asn Lys His Tyr Leu Met Cys Glu Arg Lys Ala Gly
225 230 235 240
His Asp Pro Arg Trp Thr Gln Leu Pro Leu Met Pro Lys Arg Trp Thr
245 250 255
Gly
257

<210> 1267
<211> 208
<212>Amino acid
<213> Homo sapiens

<400> 1267
Asn Gln Gly Leu Arg Asp Val Gly Leu Cys Arg Thr Cys Leu Val Asn
1 5 10 15
Lys Ile Phe Ala Ser Ser Ile Leu Gly Lys Ser His His His Ser Leu
20 25 30

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Val | Ser | Ile | Asn | Gln | Gly | His | Asn | Ala | Pro | Trp | Lys | Ala | Ala | Gly | Ser |
| 35 | | | | | 40 | | | | | | 45 | | | | |
| Leu | Pro | Leu | Lys | Ala | Ala | Tyr | Cys | Gln | Gly | Phe | Ser | Pro | Cys | Asp | Cys |
| 50 | | | | | 55 | | | | | | 60 | | | | |
| Leu | Lys | Tyr | Gly | Ser | Trp | Asp | Glu | Lys | Asp | Leu | Met | Val | Pro | Gln | Pro |
| 65 | | | | | 70 | | | | | | 75 | | | | 80 |
| Asp | Thr | His | Lys | Gly | Ser | Val | Leu | Arg | Trp | Ile | Ser | Lys | Arg | Gly | Lys |
| | | | | | 85 | | | | | | 90 | | | | 95 |
| Pro | Leu | Ala | Val | Glu | Met | Glu | Gly | His | Cys | Leu | Cys | Leu | Pro | Leu | |
| | | | | | 100 | | | | | | 105 | | | | 110 |
| Gly | Thr | Glu | Cys | Leu | Gly | Val | Lys | Pro | Ile | Val | His | Leu | Phe | Asn | Ser |
| | | | | | 115 | | | | | | 120 | | | | 125 |
| Glu | Met | Gly | Glu | Lys | Arg | Pro | Val | Ala | Gly | Ala | Arg | His | Val | Gly | Ser |
| | | | | | 130 | | | | | | 135 | | | | 140 |
| Ser | Ala | Ala | Leu | Leu | Phe | Phe | Thr | Pro | Leu | Arg | Cys | Leu | Gly | Gly | Glu |
| | | | | | 145 | | | | | | 150 | | | | 160 |
| Lys | His | Lys | Ser | Gly | Leu | Arg | Ala | Arg | Pro | Gly | Ile | Val | Pro | Ser | Leu |
| | | | | | 165 | | | | | | 170 | | | | 175 |
| Glu | Leu | Asn | Tyr | Asp | Ile | Asp | Ser | Phe | Ala | His | Met | Phe | Phe | Ser | Val |
| | | | | | 180 | | | | | | 185 | | | | 190 |
| Asp | Leu | Leu | Leu | Ile | Ile | Thr | Leu | Leu | Ser | Tyr | Tyr | Ile | Pro | Phe | Cys |
| | | | | | 195 | | | | | | 200 | | | | 205 |
| | | | | | | | | | | | | | | | 208 |

<210> 1268
 <211> 158
 <212>Amino acid
 <213> Homo sapiens

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Trp | Trp | Arg | Leu | Ala | Pro | Thr | Gln | Ala | Ile | Trp | Arg | Ala | Ala | Gly |
| 1 | | | | | 5 | | | | | | 10 | | | | 15 |
| Cys | Cys | Met | Arg | Phe | Ser | Arg | Arg | Arg | Ser | Thr | Cys | Cys | Cys | Leu | Ala |
| | | | | | | | | | | | 20 | | | | 30 |
| Ser | Cys | Ile | Phe | Leu | Leu | Tyr | Lys | Ile | Val | Arg | Gly | Asp | Gln | Pro | Ala |
| | | | | | | | | | | | 35 | | | | 45 |
| Ala | Lys | Arg | Arg | Gln | Arg | Arg | Arg | Arg | Ala | Ala | Pro | Ser | Ala | Pro | Pro |
| | | | | | | | | | | | 50 | | | | 60 |
| Gln | Ala | Ala | Arg | Leu | His | Pro | Pro | Pro | Lys | Leu | Arg | Arg | Phe | Asp | Gly |
| | | | | | | | | | | | 65 | | | | 80 |
| Val | Gln | Asp | Pro | Ala | Pro | Tyr | Ser | Trp | Ala | Ile | Asn | Gly | Lys | Val | Phe |
| | | | | | | | | | | | 85 | | | | 95 |
| Asp | Val | Thr | Gln | Arg | Pro | Ala | Asn | Phe | Leu | Arg | Gly | Pro | Arg | Gly | Pro |
| | | | | | | | | | | | 100 | | | | 110 |
| Glu | Thr | Leu | Ser | Asp | Trp | Glu | Ser | Gln | Phe | Thr | Phe | Lys | Tyr | His | His |
| | | | | | | | | | | | 115 | | | | 125 |
| Val | Gly | Lys | Leu | Leu | Lys | Glu | Gly | Glu | Glu | Pro | Thr | Val | Tyr | Ser | Asp |
| | | | | | | | | | | | 130 | | | | 140 |
| Glu | Glu | Glu | Pro | Lys | Asp | Glu | Ser | Ala | Arg | Lys | Asn | Asp | * | | |
| | | | | | | | | | | | 145 | | | | 155 |
| | | | | | | | | | | | | | | | 157 |

<210> 1269
 <211> 178
 <212>Amino acid
 <213> Homo sapiens

<400> 1269
 Gly Pro Arg Met Ala Lys Phe Leu Ser Gln Asp Gln Ile Asn Glu Tyr
 1 5 10 15
 Lys Glu Cys Phe Ser Leu Tyr Asp Lys Gln Gln Arg Gly Lys Ile Lys
 20 25 30
 Ala Thr Asp Leu Met Val Ala Met Arg Cys Leu Gly Ala Ser Pro Thr
 35 40 45
 Pro Gly Glu Val Gln Arg His Leu Gln Thr His Gly Ile Asp Gly Asn
 50 55 60
 Gly Glu Leu Asp Phe Ser Thr Phe Leu Thr Ile Met His Met Gln Ile
 65 70 75 80
 Lys Gln Glu Asp Pro Lys Lys Glu Ile Leu Ala Met Leu Met Val
 85 90 95
 Asp Lys Glu Lys Lys Gly Tyr Val Met Ala Ser Asp Leu Arg Ser Lys
 100 105 110
 Leu Thr Ser Leu Gly Glu Lys Leu Thr His Lys Glu Val Asp Asp Leu
 115 120 125
 Phe Arg Glu Ala Asp Ile Glu Pro Asn Gly Lys Val Lys Tyr Asp Glu
 130 135 140
 Phe Ile His Lys Ile Thr Leu Leu Pro Gly Arg Asp Leu Leu Lys Glu
 145 150 155 160
 Glu Asn Gly Arg Ala Ser Pro Gly Pro Glu Asn Leu Glu Gln Leu Ile
 165 170 175
 Phe Leu
 178

<210> 1270
<211> 457
<212>Amino acid
<213> Homo sapiens

<400> 1270
 Ala Asp Pro His Thr Thr Val Ile Arg Phe Phe Pro Ala Ala Ser Ala
 1 5 10 15
 Thr Lys Arg Val Leu Pro Pro Val Leu Arg Val Ser Ser Pro Arg Thr
 20 25 30
 Trp Asn Pro Asn Val Pro Glu Ser Pro Arg Ile Pro Ala Pro Arg Leu
 35 40 45
 Pro Lys Arg Met Ser Gly Ala Pro Thr Ala Gly Ala Ala Leu Met Leu
 50 55 60
 Cys Ala Ala Thr Ala Val Leu Leu Ser Ala Gln Gly Gly Pro Val Gln
 65 70 75 80
 Ser Lys Ser Pro Arg Phe Ala Ser Trp Asp Glu Met Asn Val Leu Ala
 85 90 95
 His Gly Leu Leu Gln Leu Gly Gln Gly Leu Arg Glu His Ala Glu Arg
 100 105 110
 Thr Arg Ser Gln Leu Ser Ala Leu Glu Arg Arg Leu Ser Ala Cys Gly
 115 120 125
 Ser Ala Cys Gln Gly Thr Glu Gly Ser Thr Asp Leu Pro Leu Ala Pro
 130 135 140
 Glu Ser Arg Val Asp Pro Glu Val Leu His Ser Leu Gln Thr Gln Leu
 145 150 155 160
 Lys Ala Gln Asn Ser Arg Ile Gln Gln Leu Phe His Lys Val Ala Gln
 165 170 175
 Gln Gln Arg His Leu Glu Lys Gln His Leu Arg Ile Gln His Leu Gln
 180 185 190

Ser Gln Phe Gly Leu Leu Asp His Lys His Leu Asp His Glu Val Ala
 195 200 205
 Lys Pro Ala Arg Arg Lys Arg Leu Pro Glu Met Ala Gln Pro Val Asp
 210 215 220
 Pro Ala His Asn Val Ser Arg Leu His Arg Leu Pro Arg Asp Cys Gln
 225 230 235 240
 Glu Leu Phe Gln Val Gly Glu Arg Gln Ser Gly Leu Phe Glu Ile Gln
 245 250 255
 Pro Gln Gly Ser Pro Pro Phe Leu Val Asn Cys Lys Met Thr Ser Asp
 260 265 270
 Gly Gly Trp Thr Val Ile Gln Arg Arg His Asp Gly Ser Val Asp Phe
 275 280 285
 Asn Arg Pro Trp Glu Ala Tyr Lys Ala Gly Phe Gly Asp Pro His Gly
 290 295 300
 Glu Phe Trp Leu Gly Leu Glu Lys Val His Ser Ile Thr Gly Asp Arg
 305 310 315 320
 Asn Ser Arg Leu Ala Val Gln Leu Arg Asp Trp Asp Gly Asn Ala Glu
 325 330 335
 Leu Leu Gln Phe Ser Val His Leu Gly Gly Glu Asp Thr Ala Tyr Ser
 340 345 350
 Leu Gln Leu Thr Ala Pro Val Ala Gly Gln Leu Gly Ala Thr Thr Val
 355 360 365
 Pro Pro Ser Gly Leu Ser Val Pro Phe Ser Thr Trp Asp Gln Asp His
 370 375 380
 Asp Leu Arg Arg Asp Lys Asn Cys Ala Lys Ser Leu Ser Gly GLY Trp
 385 390 395 400
 Trp Phe Gly Thr Cys Ser His Ser Asn Leu Asn Gly Gln Tyr Phe Arg
 405 410 415
 Ser Ile Pro Gln Gln Arg Gln Lys Leu Lys Lys Gly Ile Phe Trp Lys
 420 425 430
 Thr Trp Arg Gly Arg Tyr Tyr Pro Leu Gln Ala Thr Thr Met Leu Ile
 435 440 445
 Gln Pro Met Ala Ala Glu Ala Ser
 450 455 457

<210> 1271
<211> 394
<212>Amino acid
<213> Homo sapiens

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<400> 1271
Ala Leu Asp Phe Gly Asp Ser Cys Gln Trp Pro Arg Pro Gln Asp Thr
      5          10          15
Met Lys Gln Leu Pro Val Leu Glu Pro Gly Asp Lys Pro Arg Lys Ala
     20          25          30
Thr Trp Tyr Thr Leu Thr Val Pro Gly Asp Ser Pro Cys Ala Arg Val
     35          40          45
Gly His Ser Cys Ser Tyr Leu Pro Pro Val Gly Asn Ala Lys Arg Gly
     50          55          60
Lys Val Phe Ile Val Gly Gly Ala Asn Pro Asn Arg Ser Phe Ser Asp
     65          70          75          80
Val His Thr Met Asp Leu Gly Lys His Gln Trp Asp Leu Asp Thr Cys
     85          90          95
Lys Gly Leu Leu Pro Arg Tyr Glu His Ala Ser Phe Ile Pro Ser Cys
    100          105          110
Thr Pro Asp Arg Ile Trp Val Phe Gly Gly Ala Asn Gln Ser Gly Asn
    115          120          125
Arg Asn Cys Leu Gln Val Leu Asn Pro Glu Thr Arg Thr Trp Thr Thr
    130          135          140

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Pro Glu Val Thr Ser Pro Pro Pro Ser Pro Arg Thr Phe His Thr Ser
 145 150 155 160
 Ser Ala Ala Ile Gly Asn Gln Leu Tyr Val Phe Gly Gly Glu Arg
 165 170 175
 Gly Ala Gln Pro Val Gln Asp Thr Lys Leu His Val Phe Asp Ala Asn
 180 185 190
 Thr Leu Thr Trp Ser Gln Pro Glu Thr Leu Gly Asn Pro Pro Ser Pro
 195 200 205
 Arg His Gly His Val Met Val Ala Ala Gly Thr Lys Leu Phe Ile His
 210 215 220
 Gly Gly Leu Ala Gly Asp Arg Phe Tyr Asp Asp Leu His Cys Ile Asp
 225 230 235 240
 Ile Ser Asp Met Lys Trp Gln Lys Leu Asn Pro Thr Gly Ala Ala Pro
 245 250 255
 Ala Gly Cys Ala Ser His Thr Pro Ala Val Ala Met Gly Lys His Val
 260 265 270
 Tyr Ile Phe Gly Gly Met Thr Pro Ala Gly Ala Pro Gly Thr Gln Cys
 275 280 285
 Thr Gln Tyr His Thr Glu Glu Gln His Trp Asp Pro Cys Leu Lys Phe
 290 295 300
 Asp Thr Pro Ser Tyr Pro Pro Gly Thr Ile Gly Thr His Ser His Val
 305 310 315 320
 Val Ser Phe Pro Trp Pro Val Thr Cys Ala Ser Glu Lys Glu Asp Ser
 325 330 335
 Asn Ser Leu Thr Leu Asn His Glu Ala Glu Lys Glu Asp Ser Ala Asp
 340 345 350
 Lys Val Met Ser His Ser Gly Asp Ser His Glu Glu Ser Gln Thr Ala
 355 360 365
 Thr Leu Leu Cys Leu Val Phe Gly Gly Met Asn Thr Glu Gly Glu Ile
 370 375 380
 Tyr Asp Asp Cys Ile Val Thr Val Val Asp
 385 390 394

<210> 1272
 <211> 176
 <212>Amino acid
 <213> Homo sapiens

<400> 1272
 Gly Phe Ser Ile Gly Lys Ala Thr Asp Arg Met Asp Ala Phe Arg Lys
 1 5 10 15
 Ala Lys Asn Arg Ala Val His His Leu His Tyr Ile Glu Arg Tyr Glu
 20 25 30
 Asp His Thr Ile Phe His Asp Ile Ser Leu Arg Phe Lys Arg Thr His
 35 40 45
 Ile Lys Met Lys Lys Gln Pro Lys Gly Tyr Gly Leu Arg Cys His Arg
 50 55 60
 Ala Ile Ile Thr Ile Cys Arg Leu Ile Gly Ile Lys Asp Met Tyr Ala
 65 70 75 80
 Lys Val Ser Gly Ser Ile Asn Met Leu Ser Leu Thr Gln Gly Leu Phe
 85 90 95
 Arg Gly Leu Ser Arg Gln Glu Thr His Gln Gln Leu Ala Asp Lys Lys
 100 105 110
 Gly Leu His Val Val Glu Ile Arg Glu Glu Cys Gly Pro Leu Pro Ile
 115 120 125
 Val Val Ala Ser Pro Arg Gly Pro Leu Arg Lys Asp Pro Glu Pro Glu
 130 135 140
 Asp Glu Val Pro Asp Val Lys Leu Asp Trp Glu Asp Val Lys Thr Ala
 145 150 155 160

Gln Gly Met Lys Arg Ser Val Trp Ser Asn Leu Lys Arg Ala Ala Thr
 165 170 175 176

<210> 1273
<211> 457
<212>Amino acid
<213> Homo sapiens

<400> 1273
Ala Asp Pro His Thr Thr Val Ile Arg Phe Phe Pro Ala Ala Ser Ala
 1 5 10 15
Thr Lys Arg Val Leu Pro Pro Val Leu Arg Val Ser Ser Pro Arg Thr
 20 25 30
Trp Asn Pro Asn Val Pro Glu Ser Pro Arg Ile Pro Ala Pro Arg Leu
 35 40 45
Pro Lys Arg Met Ser Gly Ala Pro Thr Ala Gly Ala Ala Leu Met Leu
 50 55 60
Cys Ala Ala Thr Ala Val Leu Ser Ala Gln Gly Gly Pro Val Gln
 65 70 75 80
Ser Lys Ser Pro Arg Phe Ala Ser Trp Asp Glu Met Asn Val Leu Ala
 85 90 95
His Gly Leu Leu Gln Leu Gly Gln Gly Leu Arg Glu His Ala Glu Arg
 100 105 110
Thr Arg Ser Gln Leu Ser Ala Leu Glu Arg Arg Leu Ser Ala Cys Gly
 115 120 125
Ser Ala Cys Gln Gly Thr Glu Gly Ser Thr Asp Leu Pro Leu Ala Pro
 130 135 140
Glu Ser Arg Val Asp Pro Glu Val Leu His Ser Leu Gln Thr Gln Leu
 145 150 155 160
Lys Ala Gln Asn Ser Arg Ile Gln Gln Leu Phe His Lys Val Ala Gln
 165 170 175
Gln Gln Arg His Leu Glu Lys Gln His Leu Arg Ile Gln His Leu Gln
 180 185 190
Ser Gln Phe Gly Leu Leu Asp His Lys His Leu Asp His Glu Val Ala
 195 200 205
Lys Pro Ala Arg Arg Lys Arg Leu Pro Glu Met Ala Gln Pro Val Asp
 210 215 220
Pro Ala His Asn Val Ser Arg Leu His Arg Leu Pro Arg Asp Cys Gln
 225 230 235 240
Glu Leu Phe Gln Val Gly Glu Arg Gln Ser Gly Leu Phe Glu Ile Gln
 245 250 255
Pro Gln Gly Ser Pro Pro Phe Leu Val Asn Cys Lys Met Thr Ser Asp
 260 265 270
Gly Gly Trp Thr Val Ile Gln Arg Arg His Asp Gly Ser Val Asp Phe
 275 280 285
Asn Arg Pro Trp Glu Ala Tyr Lys Ala Gly Phe Gly Asp Pro His Gly
 290 295 300
Glu Phe Trp Leu Gly Leu Glu Lys Val His Ser Ile Thr Gly Asp Arg
 305 310 315 320
Asn Ser Arg Leu Ala Val Gln Leu Arg Asp Trp Asp Gly Asn Ala Glu
 325 330 335
Leu Leu Gln Phe Ser Val His Leu Gly Gly Glu Asp Thr Ala Tyr Ser
 340 345 350
Leu Gln Leu Thr Ala Pro Val Ala Gln Leu Gly Ala Thr Thr Val
 355 360 365
Pro Pro Ser Gly Leu Ser Val Pro Phe Ser Thr Trp Asp Gln Asp His
 370 375 380

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asp | Leu | Arg | Arg | Asp | Lys | Asn | Cys | Ala | Lys | Ser | Gly | Gly | Trp | | |
| 385 | | | | 390 | | | | | 395 | | | | 400 | | |
| Trp | Phe | Gly | Thr | Cys | Ser | His | Ser | Asn | Leu | Asn | Gly | Gln | Tyr | Phe | Arg |
| | | | | 405 | | | | | 410 | | | | 415 | | |
| Ser | Ile | Pro | Gln | Gln | Arg | Gln | Lys | Leu | Lys | Lys | Gly | Ile | Phe | Trp | Lys |
| | | | | 420 | | | | 425 | | | | 430 | | | 430 |
| Thr | Trp | Arg | Gly | Arg | Tyr | Tyr | Pro | Leu | Gln | Ala | Thr | Thr | Met | Leu | Ile |
| | 435 | | | | 440 | | | | 445 | | | | | | |
| Gln | Pro | Met | Ala | Ala | Glu | Ala | Ala | Ser | | | | | | | |
| | 450 | | | | 455 | | | 457 | | | | | | | |

<210> 1274
<211> 359
<212>Amino acid
<213> Homo sapiens

| | | | | | | | | | | | | | | | |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <400> 1274 | | | | | | | | | | | | | | | |
| Thr | Leu | Arg | Ser | Arg | Pro | Ala | Gly | Glu | Ala | Gly | Tyr | Leu | Gly | Trp | Asp |
| 1 | | | | | 5 | | | | 10 | | | | 15 | | |
| Pro | Glu | Gln | Ala | Gly | Glu | Gly | Ser | Ala | Leu | Ser | Arg | Pro | Gly | Ala | Met |
| | | | | | 20 | | | | 25 | | | | 30 | | |
| Ala | Ala | Leu | Met | Thr | Pro | Gly | Thr | Gly | Ala | Pro | Pro | Ala | Pro | Gly | Asp |
| | | | | | 35 | | | 40 | | | | 45 | | | |
| Phe | Ser | Gly | Glu | Gly | Ser | Gln | Gly | Leu | Pro | Asp | Pro | Ser | Pro | Glu | Pro |
| | | | | | 50 | | | 55 | | | | 60 | | | |
| Lys | Gln | Leu | Pro | Glu | Leu | Ile | Arg | Met | Lys | Arg | Asp | Gly | Gly | Arg | Leu |
| | | | | | 65 | | 70 | | 75 | | | | 80 | | |
| Ser | Glu | Ala | Asp | Ile | Arg | Gly | Phe | Val | Ala | Ala | Val | Val | Asn | Gly | Ser |
| | | | | | 85 | | | 90 | | | | | 95 | | |
| Ala | Gln | Gly | Ala | Gln | Ile | Gly | Ala | Trp | Gly | Gly | Leu | Gly | Val | Pro | Asp |
| | | | | | 100 | | | 105 | | | | | 110 | | |
| Pro | Asp | Trp | Glu | Val | Ser | Pro | Arg | Phe | Gly | Ser | Leu | Gly | Val | Arg | |
| | | | | | 115 | | | 120 | | | | | 125 | | |
| Arg | Cys | Pro | Thr | Thr | Ser | Thr | Gly | Pro | Arg | Val | Pro | His | Arg | Cys | Gly |
| | | | | | 130 | | | 135 | | | | 140 | | | |
| Leu | Pro | Pro | Ser | Arg | Val | Pro | Pro | His | Thr | Arg | Gly | Met | Leu | Met | Ala |
| | | | | | 145 | | 150 | | | 155 | | | 160 | | |
| Ile | Arg | Leu | Arg | Gly | Met | Asp | Leu | Glu | Glu | Thr | Ser | Val | Leu | Thr | Gln |
| | | | | | 165 | | | 170 | | | | 175 | | | |
| Ala | Leu | Ala | Gln | Ser | Gly | Gln | Gln | Leu | Trp | Pro | Glu | Ala | Trp | Arg | |
| | | | | | 180 | | | 185 | | | | 190 | | | |
| Gln | Gln | Leu | Val | Asp | Lys | His | Ser | Thr | Gly | Gly | Val | Gly | Asp | Lys | Val |
| | | | | | 195 | | | 200 | | | | 205 | | | |
| Ser | Leu | Val | Leu | Ala | Pro | Ala | Leu | Ala | Ala | Cys | Gly | Cys | Lys | Val | Ile |
| | | | | | 210 | | 215 | | | | 220 | | | | |
| Asn | His | Leu | Leu | Ser | Arg | Arg | Glu | Pro | Ile | Pro | His | Met | Gln | Gln | Pro |
| | | | | | 225 | | 230 | | | 235 | | | 240 | | |
| Val | His | Pro | Gln | Ala | Ala | Pro | Asn | Leu | Lys | Pro | Gly | Pro | Lys | Pro | Pro |
| | | | | | 245 | | | 250 | | | | 255 | | | |
| Arg | Pro | Tyr | Gln | Gly | Phe | Ser | Pro | Pro | Cys | Ser | Pro | Ala | Gln | Phe | Ser |
| | | | | | 260 | | | 265 | | | | 270 | | | |
| Pro | Pro | Arg | Ser | Pro | Ala | Gln | Arg | Leu | Gly | Pro | Leu | Trp | Leu | Gln | Thr |
| | | | | | 275 | | | 280 | | | | 285 | | | |
| Arg | Pro | Leu | Gly | Ala | Gly | Lys | Arg | Ser | Thr | Asp | Gly | Ile | Gln | Thr | Pro |
| | | | | | 290 | | 295 | | | | 300 | | | | |
| Phe | Pro | Leu | Gly | Pro | Gln | Thr | Ala | Pro | Pro | Arg | Glu | Glu | Leu | Arg | Thr |
| | | | | | 305 | | 310 | | | 315 | | | 320 | | |
| Ser | Leu | Pro | Leu | Pro | Gln | Ala | Leu | Phe | Pro | Gln | Gly | Gln | Val | Pro | Thr |
| | | | | | 325 | | | 330 | | | | 335 | | | |

Ser Ser Pro Thr Asp Thr Ser Gln Pro Arg Lys Leu Pro Phe His Ser
 340 345 350
 Leu Thr Ser Trp Ala Pro Leu
 355 359

<210> 1275
<211> 146
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(146)
<223> X = any amino acid or stop code

<400> 1275
 Arg Ala Leu Arg Glu Leu Arg Glu Arg Val Thr His Gly Leu Ala Glu
 1 5 10 15
 Ala Gly Arg Asp Arg Glu Asp Val Ser Thr Glu Leu Tyr Arg Ala Leu
 20 25 30
 Glu Ala Val Arg Leu Gln Asn Ser Glu Gly Ser Cys Glu Pro Cys Pro
 35 40 45
 Thr Ser Trp Leu Pro Phe Gly Gly Ser Cys Tyr Tyr Phe Ser Val Pro
 50 55 60
 Lys Thr Thr Trp Ala Glu Ala Gln Gly His Cys Ala Asp Ala Ser Ala
 65 70 75 80
 His Leu Ala Ile Val Gly Gly Leu Gly Glu Gln Asp Phe Leu Ser Arg
 85 90 95
 Asp Thr Ser Ala Leu Glu Tyr Trp Ile Gly Arg Arg Ala Val Gln His
 100 105 110
 Leu Arg Lys Val Gln Gly Tyr Ser Trp Val Asp Gly Val Pro Leu Ser
 115 120 125
 Phe Arg Xaa Trp Glu Gly His Pro Gly Glu Thr Trp Gly Pro Gln Val
 130 135 140
 Arg Leu
 145 146

<210> 1276
<211> 187
<212>Amino acid
<213> Homo sapiens

<400> 1276
 Arg Trp Pro Arg Ser Trp Pro Pro Arg Ala Gly Ala Ala Arg Gly Ala
 1 5 10 15
 Ala Glu Ala Ala Met Val Gly Ala Leu Cys Gly Cys Trp Phe Arg Leu
 20 25 30
 Gly Gly Ala Arg Pro Leu Ile Pro Leu Gly Pro Thr Val Val Gln Thr
 35 40 45
 Ser Met Ser Arg Ser Gln Val Ala Leu Leu Gly Leu Ser Leu Leu Leu
 50 55 60
 Met Leu Leu Leu Tyr Val Gly Leu Pro Gly Pro Pro Glu Gln Thr Ser
 65 70 75 80
 Cys Leu Trp Gly Asp Pro Asn Val Thr Val Leu Ala Gly Leu Thr Pro

| | | |
|---|-----|-----|
| 85 | 90 | 95 |
| Gly Asn Ser Pro Ile Phe Tyr Arg Glu Val Leu Pro Leu Asn Gln Ala | | |
| 100 | 105 | 110 |
| His Arg Val Glu Val Cys Cys Phe Met Glu Arg Pro Leu Thr Leu Thr | | |
| 115 | 120 | 125 |
| Arg Gly Ser Ser Trp Ala His Cys Ser Tyr Cys His Arg Gly Ala Thr | | |
| 130 | 135 | 140 |
| Gly Pro Trp Pro Leu Thr Phe Gln Val Leu Gly Thr Arg His Leu Gln | | |
| 145 | 150 | 155 |
| Arg Arg Gln Ala Gln Arg Gln Gly Gln Arg Cys Trp Ser Gly Arg | | 160 |
| 165 | 170 | 175 |
| Cys Gly Thr Trp Arg Tyr Arg Met Pro Cys Trp | | |
| 180 | 185 | 187 |

<210> 1277
<211> 481
<212>Amino acid
<213> Homo sapiens

| | | | | | | | | | | | | | | | |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <400> 1277 | | | | | | | | | | | | | | | |
| Gln | Glu | Asn | Gln | Leu | Glu | Lys | Met | Lys | Phe | Leu | Ile | Phe | Ala | Phe | |
| 1 | | | | 5 | | | 10 | | | | 15 | | | | |
| Phe | Gly | Gly | Val | His | Leu | Leu | Ser | Leu | Cys | Ser | Gly | Lys | Ala | Ile | Cys |
| | | | | 20 | | | 25 | | | | 30 | | | | |
| Lys | Asn | Gly | Ile | Ser | Lys | Arg | Thr | Phe | Glu | Glu | Ile | Lys | Glu | Glu | Ile |
| | | | 35 | | 40 | | 45 | | | | | | | | |
| Ala | Ser | Cys | Gly | Asp | Val | Ala | Lys | Ala | Ile | Ile | Asn | Leu | Ala | Val | Tyr |
| | | | 50 | | 55 | | 60 | | | | | | | | |
| Gly | Lys | Ala | Gln | Asn | Arg | Ser | Tyr | Glu | Arg | Leu | Ala | Leu | Leu | Val | Asp |
| | 65 | | | | 70 | | 75 | | | | | | | 80 | |
| Thr | Val | Gly | Pro | Arg | Leu | Ser | Gly | Ser | Lys | Asn | Leu | Glu | Lys | Ala | Ile |
| | | | 85 | | 90 | | 95 | | | | | | | | |
| Gln | Ile | Met | Tyr | Gln | Asn | Leu | Gln | Asp | Gly | Leu | Glu | Lys | Val | His | |
| | 100 | | | 105 | | 110 | | | | | | | | | |
| Leu | Glu | Pro | Val | Arg | Ile | Pro | His | Trp | Glu | Arg | Gly | Glu | Glu | Ser | Ala |
| | 115 | | | 120 | | 125 | | | | | | | | | |
| Val | Met | Leu | Glu | Pro | Arg | Ile | His | Lys | Ile | Ala | Ile | Leu | Gly | Leu | Gly |
| | 130 | | | 135 | | 140 | | | | | | | | | |
| Ser | Ser | Ile | Gly | Thr | Pro | Pro | Glu | Gly | Ile | Thr | Ala | Glu | Val | Leu | Val |
| | 145 | | | 150 | | 155 | | | | | | | 160 | | |
| Val | Thr | Ser | Phe | Asp | Glu | Leu | Gln | Arg | Arg | Ala | Ser | Glu | Ala | Arg | Gly |
| | 165 | | | 170 | | 175 | | | | | | | | | |
| Lys | Ile | Val | Val | Tyr | Asn | Gln | Pro | Tyr | Ile | Asn | Tyr | Ser | Arg | Thr | Val |
| | 180 | | | 185 | | 190 | | | | | | | | | |
| Gln | Tyr | Arg | Thr | Gln | Gly | Ala | Val | Glu | Ala | Ala | Lys | Val | Gly | Ala | Leu |
| | 195 | | | 200 | | 205 | | | | | | | | | |
| Ala | Ser | Leu | Ile | Arg | Ser | Val | Ala | Ser | Phe | Ser | Ile | Tyr | Ser | Pro | His |
| | 210 | | | 215 | | 220 | | | | | | | | | |
| Thr | Gly | Ile | Gln | Glu | Tyr | Gln | Asp | Gly | Val | Pro | Lys | Ile | Pro | Thr | Ala |
| | 225 | | | 230 | | 235 | | | | | | | 240 | | |
| Cys | 11e | Thr | Val | Gl | Asp | Ala | Glu | Met | Met | Ser | Arg | Met | Ala | Ser | His |
| | 245 | | | 250 | | 255 | | | | | | | | | |
| Gly | Ile | Lys | Ile | Val | Ile | Gln | Leu | Lys | Met | Gly | Ala | Lys | Thr | Tyr | Pro |
| | 260 | | | 265 | | 270 | | | | | | | | | |
| Asp | Thr | Asp | Ser | Phe | Asn | Thr | Val | Ala | Glu | Ile | Thr | Gly | Ser | Lys | Tyr |
| | 275 | | | 280 | | 285 | | | | | | | | | |
| Pro | Glu | Gln | Val | Val | Leu | Val | Ser | Gly | His | Leu | Asp | Ser | Trp | Asp | Val |
| | 290 | | | 295 | | 300 | | | | | | | | | |
| Gly | Gln | Gly | Ala | Met | Asp | Asp | Gly | Gly | Ala | Phe | Ile | Ser | Trp | Glu | |

| | | | |
|---|-----|-----|-----|
| 305 | 310 | 315 | 320 |
| Ala Leu Ser Leu Ile Lys Asp Leu Gly Leu Arg Pro Lys Arg Thr Leu | 325 | 330 | 335 |
| Arg Leu Val Leu Trp Thr Ala Glu Glu Gln Gly Val Gly Ala Phe | 340 | 345 | 350 |
| Gln Tyr Tyr Gln Leu His Lys Val Asn Ile Ser Asn Tyr Ser Leu Val | 355 | 360 | 365 |
| Met Glu Ser Asp Ala Gly Thr Phe Leu Pro Thr Gly Leu Gln Phe Thr | 370 | 375 | 380 |
| Gly Ser Glu Lys Ala Arg Ala Ile Met Glu Glu Val Met Ser Leu Leu | 385 | 390 | 395 |
| Gln Pro Leu Asn Ile Thr Gln Val Leu Ser His Gly Glu Gly Thr Asp | 405 | 410 | 415 |
| Ile Asn Phe Trp Ile Gln Ala Gly Val Pro Gly Ala Ser Leu Leu Asp | 420 | 425 | 430 |
| Asp Leu Tyr Lys Tyr Phe Phe His His Ser His Gly Asp Thr Met | 435 | 440 | 445 |
| Thr Val His Gly Ile Gln Thr Gln Met Asn Val Ala Ala Ala Val Trp | 450 | 455 | 460 |
| Ala Val Val Ser Tyr Val Val Ala Asp Met Glu Glu Met Leu Pro Arg | 465 | 470 | 475 |
| Ser | | | 480 |
| 481 | | | |

<210> 1278
<211> 428
<212>Amino acid
<213> Homo sapiens

| | | | |
|---|-----|-----|-----|
| <400> 1278 | | | |
| Thr Lys Pro Arg Lys Arg Arg His Gln Pro Ala Ser Gln Arg Gln Arg | 1 | 5 | 10 |
| Pro Trp Ser Ser Asp Ser Thr Gly Asp Leu Leu Ala Arg Gly Lys Gly | 20 | 25 | 30 |
| Arg Lys Glu Glu Asn Lys Gly Ser Asp Arg Val Ser Leu Ala Pro Pro | 35 | 40 | 45 |
| Ser Leu Arg Arg Pro Met Met Cys Gln Ser Glu Ala Arg Gln Gly Pro | 50 | 55 | 60 |
| Glu Leu Arg Ala Ala Lys Trp Leu His Phe Pro Gln Leu Ala Leu Arg | 65 | 70 | 75 |
| Arg Arg Leu Gly Gln Leu Ser Cys Met Ser Arg Pro Ala Leu Lys Leu | 85 | 90 | 95 |
| Arg Ser Trp Pro Leu Thr Val Leu Tyr Tyr Leu Leu Pro Phe Gly Ala | 100 | 105 | 110 |
| Leu Arg Pro Leu Ser Arg Val Gly Trp Arg Pro Val Ser Arg Val Ala | 115 | 120 | 125 |
| Leu Tyr Lys Ser Val Pro Thr Arg Leu Leu Ser Arg Ala Trp Gly Arg | 130 | 135 | 140 |
| Leu Asn Gln Val Glu Leu Pro His Trp Leu Arg Arg Pro Val Tyr Ser | 145 | 150 | 155 |
| Leu Tyr Ile Trp Thr Phe Gly Val Asn Met Lys Glu Ala Ala Val Glu | 165 | 170 | 175 |
| Asp Leu His His Tyr Arg Asn Leu Ser Glu Phe Phe Arg Arg Lys Leu | 180 | 185 | 190 |
| Lys Pro Gln Ala Arg Pro Val Cys Gly Leu His Ser Val Ile Ser Pro | 195 | 200 | 205 |
| Ser Asp Gly Arg Ile Leu Asn Phe Gly Gln Val Lys Asn Cys Glu Val | 210 | 215 | 220 |
| Glu Gln Val Lys Gly Val Thr Tyr Ser Leu Glu Ser Phe Leu Gly Pro | | | |

| | | | |
|---|-----|-----|-----|
| 225 | 230 | 235 | 240 |
| Arg Met Cys Thr Glu Asp Leu Pro Phe Pro Pro Ala Ala Ser Cys Asp | 245 | 250 | 255 |
| Ser Phe Lys Asn Gln Leu Val Thr Arg Glu Gly Asn Glu Leu Tyr His | 250 | 265 | 270 |
| Cys Val Ile Tyr Leu Ala Pro Gly Asp Tyr His Cys Phe His Ser Pro | 275 | 280 | 285 |
| Thr Asp Trp Thr Val Ser His Arg Arg His Phe Pro Gly Ser Leu Met | 290 | 295 | 300 |
| Ser Val Asn Pro Gly Met Ala Arg Trp Ile Lys Glu Leu Phe Cys His | 305 | 310 | 315 |
| Asn Glu Arg Val Val Leu Thr Gly Asp Trp Lys His Gly Phe Phe Ser | 325 | 330 | 335 |
| Leu Thr Ala Val Gly Ala Thr Asn Trp Gly Ser Ile Arg Ile Tyr Phe | 340 | 345 | 350 |
| Asp Arg Asp Leu His Thr Asn Ser Pro Arg His Ser Lys Gly Ser Tyr | 355 | 360 | 365 |
| Asn Asp Phe Ser Phe Val Thr His Thr Asn Arg Glu Gly Val Pro Met | 370 | 375 | 380 |
| Arg Lys Gly Glu His Leu Gly Glu Phe Asn Leu Gly Ser Thr Ile Val | 385 | 390 | 395 |
| Leu Ile Phe Glu Ala Pro Lys Asp Phe Asn Phe Gln Leu Lys Thr Gly | 405 | 410 | 415 |
| Gln Lys Ile Arg Phe Gly Glu Ala Leu Gly Ser Leu | 420 | 425 | 428 |

<210> 1279
<211> 633
<212>Amino acid
<213> Homo sapiens

| |
|---|
| <400> 1279 |
| Leu Pro Glu Arg Ala Phe Gly Pro Arg Thr Pro Arg Ala Pro Arg Arg |
| 1 5 10 15 |
| Arg Arg Arg Arg Leu Leu Leu Ser Pro Pro Pro Arg Pro Pro Pro . |
| 20 25 30 |
| Leu Asp Arg Glu Pro Arg Ala Pro Pro Gly Pro Trp Leu Cys Pro Ser Arg |
| 35 40 45 |
| Ala Gly Thr Ala Gln Asp Pro Ala Arg Ile Arg Glu Arg Arg Gly Arg |
| 50 55 60 |
| Val Ala Gly Gly Ala Ala Gly Pro Ala Met Glu Leu Arg Ala Arg Gly |
| 65 70 75 80 |
| Trp Trp Leu Leu Cys Ala Ala Ala Leu Val Ala Cys Ala Arg Gly |
| 85 90 95 |
| Asp Pro Ala Ser Lys Ser Arg Ser Cys Gly Glu Val Arg Gln Ile Tyr |
| 100 105 110 |
| Gly Ala Lys Gly Phe Ser Ser Ser Asp Val Pro Gln Ala Glu Ile Ser |
| 115 120 125 |
| Gly Glu His Leu Arg Ile Cys Pro Gln Gly Tyr Thr Cys Cys Thr Ser |
| 130 135 140 |
| Glu Met Glu Glu Asn Leu Ala Asn Arg Ser His Ala Glu Leu Glu Thr |
| 145 150 155 160 |
| Ala Leu Arg Asp Ser Ser Arg Val Leu Gln Ala Met Leu Ala Thr Gln |
| 165 170 175 |
| Leu Arg Ser Phe Asp Asp His Phe Gln His Leu Leu Asn Asp Ser Glu |
| 180 185 190 |
| Arg Thr Leu Gln Ala Thr Phe Pro Gly Ala Phe Gly Glu Leu Tyr Thr |
| 195 200 205 |
| Gln Asn Ala Arg Ala Phe Arg Asp Leu Tyr Ser Glu Leu Arg Leu Tyr |

| | | |
|---|-------------------------|-----|
| 210 | 215 | 220 |
| Tyr Arg Gly Ala Asn Leu His Leu Glu Glu | Thr Leu Ala Glu Phe Trp | |
| 225 | 230 | 235 |
| Ala Arg Leu Leu Glu Arg Leu Phe Lys Gln | Leu His Pro Gln Leu Leu | 240 |
| 245 | 250 | 255 |
| Leu Pro Asp Asp Tyr Leu Asp Cys Leu Gly Lys Gln Ala Glu Ala Leu | | |
| 260 | 265 | 270 |
| Arg Pro Phe Gly Glu Ala Pro Arg Glu Leu Arg Leu Arg Ala Thr Arg | | |
| 275 | 280 | 285 |
| Ala Phe Val Ala Ala Arg Ser Phe Val Gln Gly Leu Gly Val Ala Ser | | |
| 290 | 295 | 300 |
| Asp Val Val Arg Lys Val Ala Gln Val Pro Leu Gly Pro Glu Cys Ser | | |
| 305 | 310 | 315 |
| Arg Ala Val Ile Glu Ala Gly Ser Tyr Cys Ala Leu His Cys Val Gly | | 320 |
| 325 | 330 | 335 |
| Val Pro Gly Ala Arg Pro Cys Pro Asp Tyr Cys Arg Asn Val Leu Lys | | |
| 340 | 345 | 350 |
| Gly Cys Leu Ala Asn Gln Ala Asp Leu Asp Ala Glu Trp Arg Asn Leu | | |
| 355 | 360 | 365 |
| Leu Asp Ser Met Val Leu Ile Thr Asp Lys Phe Trp Gly Thr Ser Gly | | |
| 370 | 375 | 380 |
| Val Glu Ser Val Ile Gly Ser Val His Thr Trp Leu Ala Glu Ala Ile | | |
| 385 | 390 | 395 |
| Asn Ala Leu Gln Asp Asn Arg Asp Thr Leu Thr Ala Lys Val Ile Gln | | 400 |
| 405 | 410 | 415 |
| Gly Cys Gly Asn Pro Lys Val Asn Pro Gln Gly Pro Gly Pro Glu Glu | | |
| 420 | 425 | 430 |
| Lys Arg Arg Arg Gly Lys Leu Ala Pro Arg Glu Arg Pro Pro Ser Gly | | |
| 435 | 440 | 445 |
| Thr Leu Glu Lys Leu Val Ser Glu Ala Lys Ala Gln Leu Arg Asp Val | | |
| 450 | 455 | 460 |
| Gln Asp Phe Trp Ile Ser Leu Pro Gly Thr Leu Cys Ser Glu Lys Met | | |
| 465 | 470 | 475 |
| Ala Leu Ser Thr Ala Ser Asp Asp Arg Cys Trp Asn Gly Met Ala Arg | | 480 |
| 485 | 490 | 495 |
| Gly Arg Tyr Leu Pro Glu Val Met Gly Asp Gly Leu Ala Asn Gln Ile | | |
| 500 | 505 | 510 |
| Asn Asn Pro Glu Val Glu Val Asp Ile Thr Lys Pro Asp Met Thr Ile | | |
| 515 | 520 | 525 |
| Arg Gln Gln Ile Met Gln Leu Lys Ile Met Thr Asn Arg Leu Arg Ser | | |
| 530 | 535 | 540 |
| Ala Tyr Asn Gly Asn Asp Val Asp Phe Gln Asp Ala Ser Asp Asp Gly | | |
| 545 | 550 | 555 |
| Ser Gly Ser Gly Ser Gly Asp Gly Cys Leu Asp Asp Leu Cys Gly Arg | | 560 |
| 565 | 570 | 575 |
| Lys Val Ser Arg Lys Ser Ser Ser Arg Thr Pro Leu Thr His Ala | | |
| 580 | 585 | 590 |
| Leu Pro Gly Leu Ser Glu Gln Glu Gly Gln Lys Thr Ser Ala Ala Ser | | |
| 595 | 600 | 605 |
| Cys Pro Gln Pro Pro Thr Phe Leu Leu Pro Leu Leu Phe Leu Ala | | |
| 610 | 615 | 620 |
| Leu Thr Val Ala Arg Pro Arg Trp Arg | | |
| 625 | 630 | 633 |

<210> 1280

<211> 133

<212>Amino acid

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1) ... (133)

<223> X = any amino acid or stop code

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<400> 1280
Ala Thr Glu Leu Thr Arg Ala Gly Met Glu Ala Ser Ala Leu Thr Lys
      1           5           10          15
Ser Ala Val Thr Ser Val Ala Lys Val Val Arg Val Ala Ser Gly Ser
      20          25          30
Ala Val Val Leu Pro Leu Ala Arg Ile Ala Thr Ser Cys Asp Xaa Arg
      35          40          45
Val Gly Gly Pro Val Gln Ala Val Pro Met Val Leu Ser Ala Met Gly
      50          55          60
Leu Gln Leu Arg Ala Gly Ile Ala Ser Ser Ser Ile Ala Ala Lys Met
      65          70          75          80
Met Ser Ala Ala Ala Ile Ala Asn Gly Gly Val Ser Pro Gly Gln
      85          90          95
Pro Leu Trp Leu Leu Leu Gln Ser Leu Gly Ala Thr Gly Ieu Ser Gly
      100         105         110
Leu Thr Lys Phe Ile Leu Gly Ser Ile Gly Ser Ala Ile Ala Ala Val
      115         120         125
Ile Ala Arg Phe Tyr
      130         133

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<210> 1281
<211> 457
<212>Amino acid
<213> Homo sapiens

```

<400> 1281
Thr Asn Gly Arg Asn Leu Leu His His Trp Ile Leu Gly Val Cys Gly
      1          5          10          15
Met His Pro His His Gln Glu Thr Leu Lys Lys Asn Arg Val Val Leu
      20          25          30
Ala Lys Gln Leu Leu Leu Ser Glu Leu Leu Glu His Leu Leu Glu Lys
      35          40          45
Asp Ile Ile Thr Leu Glu Met Arg Glu Leu Ile Gln Ala Lys Val Gly
      50          55          60
Ser Phe Ser Gln Asn Val Glu Leu Leu Asn Leu Leu Pro Lys Arg Gly
      65          70          75          80
Pro Gln Ala Phe Asp Ala Phe Cys Glu Ala Leu Arg Glu Thr Lys Gln
      85          90          95
Gly His Leu Glu Asp Met Leu Leu Thr Thr Leu Ser Gly Leu Gln His
      100         105         110
Val Leu Pro Pro Leu Ser Cys Asp Tyr Asp Leu Ser Leu Pro Phe Pro
      115         120         125
Val Cys Glu Ser Cys Pro Leu Tyr Lys Lys Leu Arg Leu Ser Thr Asp
      130         135         140
Thr Val Glu His Ser Leu Asp Asn Lys Asp Gly Pro Val Cys Leu Gln
      145         150         155         160
Val Lys Pro Cys Thr Pro Glu Phe Tyr Gln Thr His Phe Gln Leu Ala
      165         170         175
Tyr Arg Leu Gln Ser Arg Pro Arg Gly Leu Ala Leu Val Leu Ser Asn
      180         185         190
Val His Phe Thr Gly Glu Lys Glu Leu Glu Phe Arg Ser Gly Gly Asp
      195         200         205
Val Asp His Ser Thr Leu Val Thr Leu Phe Lys Leu Leu Gly Tyr Asp
      210         215         220

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Val His Val Leu Cys Asp Gln Thr Ala Gln Glu Met Gln Glu Lys Ile
 225 230 235 240
 Gln Asn Phe Ala Gln Leu Pro Ala His Arg Val Thr Asp Ser Cys Ile
 245 250 255
 Val Ala Leu Leu Ser His Gly Val Glu Gly Ala Ile Tyr Gly Val Asp
 260 265 270
 Gly Lys Leu Leu Gln Leu Gln Glu Val Phe Gln Leu Phe Asp Asn Ala
 275 280 285
 Asn Cys Pro Ser Leu Gln Asn Lys Pro Lys Met Phe Phe Ile Gln Ala
 290 295 300
 Cys Arg Gly Gly Ala Ile Gly Ser Leu Gly His Leu Leu Leu Phe Thr
 305 310 315 320
 Ala Ala Thr Ala Ser Leu Ala Leu Glu Thr Asp Arg Gly Val Asp Gln
 325 330 335
 Gln Asp Gly Lys Asn His Ala Gly Ser Pro Gly Cys Glu Glu Ser Asp
 340 345 350
 Ala Gly Lys Glu Lys Leu Pro Lys Met Arg Leu Pro Thr Arg Ser Asp
 355 360 365
 Met Ile Cys Gly Tyr Ala Cys Leu Lys Gly Thr Ala Ala Met Arg Asn
 370 375 380
 Thr Lys Arg Gly Ser Trp Tyr Ile Glu Ala Leu Ala Gln Val Phe Ser
 385 390 395 400
 Glu Arg Ala Cys Asp Met His Val Ala Asp Met Leu Val Lys Val Asn
 405 410 415
 Ala Leu Ile Lys Asp Arg Glu Gly Tyr Ala Pro Gly Thr Glu Phe His
 420 425 430
 Arg Cys Lys Glu Met Ser Glu Tyr Cys Ser Thr Leu Cys Arg His Leu
 435 440 445
 Tyr Leu Phe Pro Gly His Pro Pro Thr
 450 455 457

<210> 1282
<211> 195
<212> Amino acid
<213> Homo sapiens

<400> 1282
 Val Arg Gly Lys Glu Val Met Ala Ala Leu Cys Arg Thr Arg Ala Val
 1 5 10 15
 Ala Ala Glu Ser His Phe Leu Arg Val Phe Leu Phe Phe Arg Pro Phe
 20 25 30
 Arg Gly Val Gly Thr Glu Ser Gly Ser Glu Ser Gly Ser Ser Asn Ala
 35 40 45
 Lys Glu Pro Lys Thr Arg Ala Gly Gly Phe Ala Ser Ala Leu Glu Arg
 50 55 60
 His Ser Glu Leu Leu Gln Lys Val Glu Pro Leu Gln Lys Gly Ser Pro
 65 70 75 80
 Lys Asn Val Glu Ser Phe Ala Ser Met Leu Arg His Ser Pro Leu Thr
 85 90 95
 Gln Met Gly Pro Ala Lys Asp Lys Leu Val Ile Gly Arg Ile Phe His
 100 105 110
 Ile Val Glu Asn Asp Leu Tyr Ile Asp Phe Gly Gly Lys Phe His Cys
 115 120 125
 Val Cys Arg Arg Pro Glu Val Asp Gly Glu Lys Tyr Gln Lys Gly Thr
 130 135 140
 Arg Val Arg Leu Arg Leu Leu Asp Leu Glu Leu Thr Ser Arg Phe Leu
 145 150 155 160
 Gly Ala Thr Thr Asp Thr Thr Val Leu Glu Ala Asn Ala Val Leu Leu
 165 170 175

Gly Ile Gln Glu Ser Lys Asp Ser Arg Ser Lys Glu Glu His Leu Glu
 180 185 190
 Lys Tyr Ile
 195

<210> 1283
 <211> 1499
 <212>Amino acid
 <213> Homo sapiens

<400> 1283
 Ile Pro Gly Ala Ser Pro Ala Pro Arg Arg Ala Ala Pro Leu Arg Leu
 1 5 10 15
 Gly Leu Arg Leu Ala Ser Gly Trp Ala Arg Ala Pro Gly Gly Val Ser
 20 25 30
 Pro Val Pro Gly Pro Gly Met Gly Gly Asp Ala Pro Thr Met Ala Arg
 35 40 45
 Ala Gln Ala Leu Val Leu Glu Leu Thr Phe Gln Leu Cys Ala Pro Glu
 50 55 60
 Thr Glu Thr Pro Glu Val Gly Cys Thr Phe Glu Glu Gly Ser Asp Pro
 65 70 75 80
 Ala Val Pro Cys Glu Tyr Ser Gln Ala Gln Tyr Asp Asp Phe Gln Trp
 85 90 95
 Glu Gln Val Arg Ile His Pro Gly Thr Arg Ala Pro Ala Asp Leu Pro
 100 105 110
 His Gly Ser Tyr Leu Met Val Asn Thr Ser Gln His Ala Pro Gly Gln
 115 120 125
 Arg Ala His Val Ile Phe Gln Ser Leu Ser Glu Asn Asp Thr His Cys
 130 135 140
 Val Gln Phe Ser Tyr Phe Leu Tyr Ser Arg Asp Gly His Ser Pro Gly
 145 150 155 160
 Thr Leu Gly Val Tyr Val Arg Val Asn Gly Gly Pro Leu Gly Ser Ala
 165 170 175
 Val Trp Asn Met Thr Gly Ser His Gly Arg Gln Trp His Gln Ala Glu
 180 185 190
 Leu Ala Val Ser Thr Phe Trp Pro Asn Glu Tyr Gln Val Leu Phe Glu
 195 200 205
 Ala Leu Ile Ser Pro Asp Arg Arg Gly Tyr Met Gly Leu Asp Asp Ile
 210 215 220
 Leu Leu Leu Ser Tyr Pro Cys Ala Lys Ala Pro His Phe Ser Arg Leu
 225 230 235 240
 Gly Asp Val Glu Val Asn Ala Gly Gln Asn Ala Ser Phe Gln Cys Met
 245 250 255
 Ala Ala Gly Arg Ala Ala Glu Ala Glu Arg Phe Leu Leu Gln Arg Gln
 260 265 270
 Ser Gly Ala Leu Val Pro Ala Ala Gly Val Arg His Ile Ser His Arg
 275 280 285
 Arg Phe Leu Ala Thr Phe Pro Leu Ala Ala Val Ser Arg Ala Glu Gln
 290 295 300
 Asp Leu Tyr Arg Cys Val Ser Gln Ala Pro Arg Gly Arg Gly Thr Ser
 305 310 315 320
 Leu Asn Phe Ala Glu Phe Met Val Lys Glu Pro Pro Thr Pro Ile Ala
 325 330 335
 Pro Pro Gln Leu Arg Ala Gly Pro Thr Tyr Leu Ile Ile Gln Leu
 340 345 350
 Asn Thr Asn Ser Ile Ile Gly Asp Gly Pro Ile Val Arg Lys Glu Ile
 355 360 365
 Glu Tyr Arg Met Ala Arg Gly Pro Trp Ala Glu Val His Ala Val Ser
 370 375 380

Leu Gln Thr Tyr Lys Leu Trp His Leu Asp Pro Asp Thr Glu Tyr Glu
 385 390 395 400
 Ile Ser Val Leu Leu Thr Arg Pro Gly Asp Gly Gly Thr Gly Arg Pro
 405 410 415
 Gly Pro Pro Leu Ile Ser Arg Thr Lys Cys Ala Glu Pro Met Arg Ala
 420 425 430
 Pro Lys Gly Leu Ala Phe Ala Glu Ile Gln Ala Arg Gln Leu Thr Leu
 435 440 445
 Gln Trp Glu Pro Leu Gly Tyr Asn Val Thr Arg Cys His Thr Tyr Thr
 450 455 460
 Val Ser Leu Cys Tyr His Tyr Thr Leu Gly Ser Ser His Asn Gln Thr
 465 470 475 480
 Ile Arg Glu Cys Val Lys Thr Glu Gln Gly Val Ser Arg Tyr Thr Met
 485 490 495
 Lys Asn Leu Leu Pro Tyr Arg Asn Val His Val Arg Leu Val Leu Thr
 500 505 510
 Asn Pro Glu Gly Arg Lys Glu Gly Lys Glu Val Thr Phe Gln Thr Asp
 515 520 525
 Glu Asp Val Pro Ser Gly Ile Ala Ala Glu Ser Leu Thr Phe Thr Pro
 530 535 540
 Leu Glu Asp Met Ile Phe Leu Lys Trp Glu Glu Pro Gln Glu Pro Asn
 545 550 555 560
 Gly Leu Ile Thr Gln Tyr Glu Ile Ser Tyr Gln Ser Ile Glu Ser Ser
 565 570 575
 Asp Pro Ala Val Asn Val Pro Gly Pro Arg Arg Thr Ile Ser Lys Leu
 580 585 590
 Arg Asn Glu Thr Tyr His Val Phe Ser Asn Leu His Pro Gly Thr Thr
 595 600 605
 Tyr Leu Phe Ser Val Arg Ala Arg Thr Gly Lys Gly Phe Gly Gln Ala
 610 615 620
 Ala Leu Thr Glu Ile Thr Thr Asn Ile Ser Ala Pro Ser Phe Asp Tyr
 625 630 635 640
 Ala Asp Met Pro Ser Pro Leu Gly Glu Ser Glu Asn Thr Ile Thr Val
 645 650 655
 Leu Leu Arg Pro Ala Gln Gly Arg Gly Ala Pro Ile Ser Val Tyr Gln
 660 665 670
 Val Ile Val Glu Glu Glu Gln Gly Ser Arg Arg Leu Arg Arg Glu Pro
 675 680 685
 Gly Gly Gln Asp Cys Phe Pro Val Pro Leu Thr Phe Glu Ala Ala Leu
 690 695 700
 Ala Arg Gly Leu Val Asp Tyr Phe Gly Ala Glu Leu Ala Ala Ser Ser
 705 710 715 720
 Leu Pro Glu Ala Met Pro Phe Thr Val Gly Asp Asn Lys Thr Tyr Arg
 725 730 735
 Gly Phe Trp Asn Pro Pro Leu Glu Pro Arg Lys Ala Tyr Leu Ile Tyr
 740 745 750
 Phe Gln Ala Ala Ser His Leu Lys Gly Glu Thr Arg Leu Asn Cys Ile
 755 760 765
 Arg Ile Ala Arg Lys Ala Ala Cys Lys Glu Ser Lys Arg Pro Leu Glu
 770 775 780
 Val Ser Gln Arg Ser Glu Glu Met Gly Leu Ile Leu Gly Ile Cys Ala
 785 790 795 800
 Gly Gly Leu Ala Val Leu Ile Leu Leu Gln Ala Ile Ile Val Ile
 805 810 815
 Ile Arg Lys Gly Arg Asp His Tyr Ala Tyr Ser Tyr Tyr Pro Lys Pro
 820 825 830
 Val Asn Met Thr Lys Ala Thr Val Asn Tyr Arg Gln Glu Lys Thr His
 835 840 845
 Met Met Ser Ala Val Asp Arg Ser Phe Thr Asp Gln Ser Thr Leu Gln
 850 855 860
 Glu Asp Glu Arg Leu Gly Leu Ser Ser Phe Met Asp Thr His Gly Tyr Ser
 865 870 875 880
 Thr Arg Gly Asp Gln Arg Ser Gly Gly Val Thr Glu Ala Ser Ser Leu
 885 890 895

Leu Gly Gly Ser Pro Arg Arg Pro Cys Gly Arg Lys Gly Ser Pro Tyr
 900 905 910
 His Thr Gly Gln Leu His Pro Ala Val Arg Val Ala Asp Leu Leu Gln
 915 920 925
 His Ile Asn Gln Met Lys Thr Ala Glu Gly Tyr Gly Phe Lys Gln Glu
 930 935 940
 Tyr Glu Ser Phe Phe Glu Gly Trp Asp Ala Thr Lys Lys Lys Asp Lys
 945 950 955 960
 Val Lys Gly Ser Arg Gln Glu Pro Met Pro Ala Tyr Asp Arg His Arg
 965 970 975
 Val Lys Leu His Pro Met Leu Gly Asp Pro Asn Ala Asp Tyr Ile Asn
 980 985 990
 Ala Asn Tyr Ile Asp Ile Arg Ile Asn Arg Glu Gly Tyr His Arg Ser
 995 1000 1005
 Asn His Phe Ile Ala Thr Gln Gly Pro Lys Pro Glu Met Val Tyr Asp
 1010 1015 1020
 Phe Trp Arg Met Val Trp Gln Glu His Cys Ser Ser Ile Val Met Ile
 1025 1030 1035 1040
 Thr Lys Leu Val Glu Val Gly Arg Val Lys Cys Ser Arg Tyr Trp Pro
 1045 1050 1055
 Glu Asp Ser Asp Thr Tyr Gly Asp Ile Lys Ile Met Leu Val Lys Thr
 1060 1065 1070
 Glu Thr Leu Ala Glu Tyr Val Val Arg Thr Phe Ala Leu Glu Arg Arg
 1075 1080 1085
 Gly Tyr Ser Ala Arg His Glu Val Arg Gln Phe His Phe Thr Ala Trp
 1090 1095 1100
 Pro Glu His Gly Val Pro Tyr His Ala Thr Gly Leu Leu Ala Phe Ile
 1105 1110 1115 1120
 Arg Arg Val Lys Ala Ser Thr Pro Pro Asp Ala Gly Pro Ile Val Ile
 1125 1130 1135
 His Cys Ser Ala Gly Thr Gly Arg Thr Gly Cys Tyr Ile Val Leu Asp
 1140 1145 1150
 Val Met Leu Asp Met Ala Glu Cys Glu Gly Val Val Asp Ile Tyr Asn
 1155 1160 1165
 Cys Val Lys Thr Leu Cys Ser Arg Arg Val Asn Met Ile Gln Thr Glu
 1170 1175 1180
 Glu Gln Tyr Ile Phe Ile His Asp Ala Ile Leu Glu Ala Cys Leu Cys
 1185 1190 1195 1200
 Gly Glu Thr Thr Ile Pro Val Ser Glu Phe Lys Ala Thr Tyr Lys Glu
 1205 1210 1215
 Met Ile Arg Ile Asp Pro Gln Ser Asn Ser Ser Gln Leu Arg Glu Glu
 1220 1225 1230
 Phe Gln Thr Leu Asn Ser Val Thr Pro Pro Leu Asp Val Glu Gln Cys
 1235 1240 1245
 Ser Ile Ala Leu Leu Pro Arg Asn Arg Asp Lys Asn Arg Ser Met Asp
 1250 1255 1260
 Val Leu Pro Pro Asp Arg Cys Leu Pro Phe Leu Ile Ser Thr Asp Gly
 1265 1270 1275 1280
 Asp Ser Asn Asn Tyr Ile Asn Ala Ala Leu Thr Asp Ser Tyr Thr Arg
 1285 1290 1295
 Ser Ala Ala Phe Ile Val Thr Leu His Pro Leu Gln Ser Thr Thr Pro
 1300 1305 1310
 Asp Phe Trp Gly Leu Val Tyr Asp Tyr Gly Cys Thr Ser Ile Val Met
 1315 1320 1325
 Leu Asn Gln Leu Asn Gln Ser Asn Ser Ala Trp Pro Cys Leu Gln Tyr
 1330 1335 1340
 Trp Pro Glu Pro Gly Arg Gln Gln Tyr Gly Leu Met Glu Val Glu Phe
 1345 1350 1355 1360
 Met Ser Gly Thr Ala Asp Glu Asp Leu Val Ala Arg Val Phe Arg Val
 1365 1370 1375
 Gln Asn Ile Ser Arg Leu Gln Glu Gly His Leu Leu Val Arg His Phe
 1380 1385 1390
 Gln Phe Leu Arg Trp Ser Ala Tyr Arg Asp Thr Pro Asp Ser Lys Lys
 1395 1400 1405

Ala Phe Leu His Leu Leu Ala Glu Gly Asp Lys Trp Gln Ala Glu Ser
 1410 1415 1420
 Gly Asp Gly Arg Thr Ile Val His Cys Leu Asn Gly Gly Gly Arg Ser
 1425 1430 1435 1440
 Gly Thr Phe Cys Ala Cys Ala Thr Val Leu Glu Met Ile Arg Cys His
 1445 1450 1455
 Asn Leu Val Asp Val Phe Phe Ala Ala Lys Thr Leu Arg Asn Tyr Lys
 1460 1465 1470
 Pro Asn Met Val Glu Thr Met Asp Gln Tyr His Phe Cys Tyr Asp Val
 1475 1480 1485
 Ala Leu Glu Tyr Leu Glu Gly Leu Glu Ser Arg
 1490 1495 1499

<210> 1284
 <211> 430
 <212>Amino acid
 <213> Homo sapiens

<400> 1284
 Thr Lys Pro Arg Lys Arg Arg His Gln Pro Ala Ser Gln Arg Gln Arg
 1 5 10 15
 Pro Trp Ser Ser Asp Ser Thr Gly Asp Leu Leu Ala Arg Gly Lys Gly
 20 25 30
 Arg Lys Glu Glu Asn Lys Gly Ser Asp Arg Val Ser Leu Ala Pro Pro
 35 40 45
 Ser Leu Arg Arg Pro Met Met Cys Gln Ser Glu Ala Arg Gln Gly Pro
 50 55 60
 Glu Leu Arg Ala Ala Lys Trp Leu His Phe Pro Gln Leu Ala Leu Arg
 65 70 75 80
 Arg Arg Leu Gly Gln Leu Ser Cys Met Ser Arg Pro Ala Leu Lys Leu
 85 90 95
 Arg Ser Trp Pro Leu Thr Val Leu Tyr Tyr Leu Leu Pro Phe Gly Ala
 100 105 110
 Leu Arg Pro Leu Ser Arg Val Gly Trp Arg Pro Val Ser Arg Val Ala
 115 120 125
 Leu Tyr Lys Ser Val Pro Thr Arg Leu Leu Ser Arg Ala Trp Gly Arg
 130 135 140
 Leu Asn Gln Val Glu Leu Pro His Trp Leu Arg Arg Pro Val Tyr Ser
 145 150 155 160
 Leu Tyr Ile Trp Thr Phe Gly Val Asn Met Lys Glu Ala Ala Val Glu
 165 170 175
 Asp Leu His His Tyr Arg Asn Leu Ser Glu Phe Phe Arg Arg Lys Leu
 180 185 190
 Lys Pro Gln Ala Arg Pro Val Cys Gly Leu His Ser Val Ile Ser Pro
 195 200 205
 Ser Asp Gly Arg Ile Leu Asn Phe Gly Gln Val Lys Asn Cys Glu Val
 210 215 220
 Glu Gln Val Lys Gly Val Thr Tyr Ser Leu Glu Ser Phe Leu Gly Pro
 225 230 235 240
 Arg Met Cys Thr Glu Asp Leu Pro Phe Pro Pro Ala Ala Ser Cys Asp
 245 250 255
 Ser Phe Lys Asn Gln Leu Val Thr Arg Glu Gly Asn Glu Leu Tyr His
 260 265 270
 Cys Val Ile Tyr Leu Ala Pro Gly Asp Tyr His Cys Phe His Ser Pro
 275 280 285
 Thr Asp Trp Thr Val Ser His Arg Arg His Phe Pro Gly Ser Leu Met
 290 295 300
 Ser Val Asn Pro Gly Met Ala Arg Trp Ile Lys Glu Leu Phe Cys His
 305 310 315 320

Asn Glu Arg Val Val Leu Thr Gly Asp Trp Lys His Gly Phe Phe Ser
 325 330 335
 Leu Thr Ala Val Gly Ala Thr Asn Trp Gly Ser Ile Arg Ile Tyr Phe
 340 345 350
 Asp Arg Asp Leu His Thr Asn Ser Pro Arg His Ser Lys Gly Ser Tyr
 355 360 365
 Asn Asp Phe Ser Phe Val Thr His Thr Asn Arg Glu Gly Val Pro Met
 370 375 380
 Ala Leu Arg Gly Glu His Leu Gly Gln Ser Phe Asn Leu Gly Ser Thr
 385 390 395 400
 Ile Val Leu Ile Phe Glu Ala Pro Lys Asp Phe Asn Phe Gln Leu Lys
 405 410 415
 Thr Gly Gln Lys Ile Arg Phe Gly Glu Ala Leu Gly Ser Leu
 420 425 430

<210> 1285
 <211> 957
 <212>Amino acid
 <213> Homo sapiens

<400> 1285
 Ala Glu Leu Gly Leu Phe Gly Ser Leu Arg Phe Ser Ser Leu Leu His
 1 5 10 15
 Phe Pro Pro Arg Pro Arg Ser Pro Ala Ser Ala Cys Gly Pro Gly Glu
 20 25 30
 Gly Arg Met Glu Arg Gly Leu Pro Leu Leu Cys Ala Val Leu Ala Leu
 35 40 45
 Val Leu Ala Pro Ala Gly Ala Phe Arg Asn Asp Lys Cys Gly Asp Thr
 50 55 60
 Ile Lys Ile Glu Ser Pro Gly Tyr Leu Thr Ser Pro Gly Tyr Pro His
 65 70 75 80
 Ser Tyr His Pro Ser Glu Lys Cys Glu Trp Leu Ile Gln Ala Pro Asp
 85 90 95
 Pro Tyr Gln Arg Ile Met Ile Asn Phe Asn Pro His Phe Asp Leu Glu
 100 105 110
 Asp Arg Asp Cys Lys Tyr Asp Tyr Val Glu Val Phe Asp Gly Glu Asn
 115 120 125
 Glu Asn Gly His Phe Arg Gly Lys Phe Cys Gly Lys Ile Ala Pro Pro
 130 135 140
 Pro Val Val Ser Ser Gly Pro Phe Leu Phe Ile Lys Phe Val Ser Asp
 145 150 155 160
 Tyr Glu Thr His Gly Ala Gly Phe Ser Ile Arg Tyr Glu Ile Phe Lys
 165 170 175
 Arg Gly Pro Glu Cys Ser Gln Asn Tyr Thr Thr Pro Ser Gly Val Ile
 180 185 190
 Lys Ser Pro Gly Phe Pro Glu Lys Tyr Pro Asn Ser Leu Glu Cys Thr
 195 200 205
 Tyr Ile Val Phe Ala Pro Lys Met Ser Glu Ile Ile Leu Asp Phe Glu
 210 215 220
 Ser Phe Asp Leu Glu Pro Asp Ser Asn Pro Pro Gly Gly Met Phe Cys
 225 230 235 240
 Arg Tyr Asp Arg Leu Glu Ile Trp Asp Gly Phe Pro Asp Val Gly Pro
 245 250 255
 His Ile Gly Arg Tyr Cys Gly Gln Lys Thr Pro Gly Arg Ile Arg Ser
 260 265 270
 Ser Ser Gly Ile Leu Ser Met Val Phe Tyr Thr Asp Ser Ala Ile Ala
 275 280 285
 Lys Glu Gly Phe Ser Ala Asn Tyr Ser Val Leu Gln Ser Ser Val Ser
 290 295 300

Glu Asp Phe Lys Cys Met Glu Ala Leu Gly Met Glu Ser Gly Glu Ile
 305 310 315 320
 His Ser Asp Gln Ile Thr Ala Ser Ser Gln Tyr Ser Thr Asn Trp Ser
 325 330 335 340
 Ala Glu Arg Ser Arg Leu Asn Tyr Pro Glu Asn Gly Trp Thr Pro Gly
 340 345 350 355
 Glu Asp Ser Tyr Arg Glu Trp Ile Gln Val Asp Leu Gly Leu Leu Arg
 355 360 365 370
 Phe Val Thr Ala Val Gly Thr Gln Gly Ala Ile Ser Lys Glu Thr Lys
 370 375 380 385
 Lys Lys Tyr Tyr Val Lys Thr Tyr Lys Ile Asp Val Ser Ser Asn Gly
 390 395 400 405
 Glu Asp Trp Ile Thr Ile Lys Glu Gly Asn Lys Pro Val Leu Phe Gln
 405 410 415 420
 Gly Asn Thr Asn Pro Thr Asp Val Val Ala Val Phe Pro Lys Pro
 420 425 430 435
 Leu Ile Thr Arg Phe Val Arg Ile Lys Pro Ala Thr Trp Glu Thr Gly
 435 440 445 450
 Ile Ser Met Arg Phe Glu Val Tyr Gly Cys Lys Ile Thr Asp Tyr Pro
 450 455 460 465
 Cys Ser Gly Met Leu Gly Met Val Ser Gly Leu Ile Ser Asp Ser Gln
 470 475 480 485
 Ile Thr Ser Ser Asn Gln Gly Asp Arg Asn Trp Met Pro Glu Asn Ile
 485 490 495 500
 Arg Leu Val Thr Ser Arg Ser Gly Trp Ala Leu Pro Pro Ala Pro His
 500 505 510 515
 Ser Tyr Ile Asn Glu Trp Leu Gln Ile Asp Leu Gly Glu Glu Lys Ile
 520 525 530 535
 Val Arg Gly Ile Ile Ile Gln Gly Gly Lys His Arg Glu Asn Lys Val
 535 540 550 555
 Phe Met Arg Lys Phe Lys Ile Gly Tyr Ser Asn Asn Gly Ser Asp Trp
 555 560 565 570
 Lys Met Ile Met Asp Asp Ser Lys Arg Lys Ala Lys Ser Phe Glu Gly
 575 580 585 590
 Asn Asn Asn Tyr Asp Thr Pro Glu Leu Arg Thr Phe Pro Ala Leu Ser
 595 600 605 610
 Thr Arg Phe Ile Arg Ile Tyr Pro Glu Arg Ala Thr His Gly Gly Leu
 615 620 625 630
 Gly Leu Arg Met Glu Leu Leu Gly Cys Glu Val Glu Ala Pro Thr Ala
 630 635 640 645
 Gly Pro Thr Thr Pro Asn Gly Asn Leu Val Asp Glu Cys Asp Asp Asp
 650 655 660 665
 Gln Ala Asn Cys His Ser Gly Thr Gly Asp Arg Phe Gln Leu Thr Gly
 670 675 680 685
 Gly Thr Thr Val Leu Ala Thr Glu Lys Pro Thr Val Ile Asp Ser Thr
 690 695 700 705
 Ile Gln Ser Glu Phe Pro Thr Tyr Gly Phe Asn Cys Glu Phe Gly Trp
 710 715 720 725
 Gly Ser His Lys Thr Phe Cys His Trp Glu His Asp Asn His Val Gln
 730 735 740 745
 Leu Lys Trp Ser Val Leu Thr Ser Lys Thr Gly Pro Ile Gln Asp His
 755 760 765 770
 Thr Gly Asp Gly Asn Phe Ile Tyr Ser Gln Ala Asp Glu Asn Gln Lys
 775 780 785 790
 Gly Lys Val Ala Arg Leu Val Ser Pro Val Val Tyr Ser Gln Asn Ser
 795 800 805 810

Gly Glu Ile Gly Lys Gly Asn Leu Gly Gly Ile Ala Val Asp Asp Ile
 820 825 830
 Ser Ile Asn Asn His Ile Ser Gln Glu Asp Cys Ala Lys Pro Ala Asp
 835 840 845
 Leu Asp Lys Lys Asn Pro Glu Ile Lys Ile Asp Glu Thr Gly Ser Thr
 850 855 860
 Pro Gly Tyr Glu Gly Glu Gly Asp Lys Asn Ile Ser Arg Lys
 865 870 875 880
 Pro Gly Asn Val Leu Lys Thr Leu Glu Pro Ile Leu Ile Thr Ile Ile
 885 890 895
 Ala Met Ser Ala Leu Gly Val Leu Leu Gly Ala Val Cys Gly Val Val
 900 905 910
 Leu Tyr Cys Ala Cys Trp His Asn Gly Met Ser Glu Arg Asn Leu Ser
 915 920 925
 Ala Leu Glu Asn Tyr Asn Phe Glu Leu Val Asp Gly Val Lys Leu Lys
 930 935 940
 Lys Asp Lys Leu Asn Thr Gln Ser Thr Tyr Ser Glu Ala
 945 950 955 957

<210> 1286
<211> 173
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(173)
<223> X = any amino acid or stop code

<400> 1286
 His Glu Gly Ser Ala Leu Thr Trp Ala Ser His Tyr Gln Glu Arg Leu
 1 5 10 15
 Asn Ser Glu Gln Ser Cys Leu Asn Glu Trp Thr Ala Met Ala Asp Leu
 20 25 30
 Glu Ser Leu Arg Pro Pro Ser Ala Glu Pro Gly Gly Ser Val Cys Gly
 35 40 45
 Gly Glu Gly Leu Gly Gly Glu Gly Arg Ile Met Gln Trp Gly Ala
 50 55 60
 Trp Trp Arg Gly Glu Arg Ala Pro Xaa Leu Arg Gly Ser Ala Pro Arg
 65 70 75 80
 Ser Ser Glu Gln Glu Gln Met Glu Gln Ala Ile Arg Ala Glu Leu Trp
 85 90 95
 Lys Val Leu Asp Val Ser Asp Leu Glu Ser Val Thr Ser Lys Glu Ile
 100 105 110
 Arg Gln Ala Leu Glu Leu Arg Leu Gly Leu Pro Leu Gln Pro Val Pro
 115 120 125
 Xaa Leu His Arg Gln Pro Asp Ala Ala Ala Gly Gly Thr Ala Gly Pro
 130 135 140
 Ser Leu Pro His Leu Pro Pro Pro Leu Pro Gly Leu Arg Val Glu Arg
 145 150 155 160
 Ser Lys Pro Gly Gly Ala Ala Glu Glu Gln Val Gly Leu
 165 170 173

<210> 1287
<211> 181
<212>Amino acid
<213> Homo sapiens

<400> 1287

| | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Ala | Ala | Leu | Asp | Leu | Arg | Ala | Glu | Leu | Asp | Ser | Leu | Val | Leu | Gln | |
| 1 | | | | | 5 | | | | 10 | | | | | 15 | | |
| Leu | Leu | Gly | Asp | Leu | Glu | Glu | Leu | Glu | Gly | Lys | Arg | Thr | Val | Leu | Asn | |
| | | | | | | 20 | | | 25 | | | | | 30 | | |
| Ala | Arg | Val | Glu | Glu | Gly | Trp | Leu | Ser | Leu | Ala | Lys | Ala | Arg | Tyr | Ala | |
| | | | | | | 35 | | | 40 | | | | 45 | | | |
| Met | Gly | Ala | Lys | Ser | Val | Gly | Pro | Leu | Gln | Tyr | Ala | Ser | His | Met | Glu | |
| | | | | | 50 | | | | 55 | | | 60 | | | | |
| Pro | Gln | Val | Cys | Ieu | His | Ala | Ser | Glu | Ala | Gln | Glu | Gly | Leu | Gln | Lys | |
| | | | | | | 65 | | | 70 | | | 75 | | | 80 | |
| Phe | Lys | Val | Val | Arg | Ala | Gly | Val | His | Ala | Pro | Glu | Glu | Val | Gly | Pro | |
| | | | | | | 85 | | | 90 | | | 95 | | | | |
| Arg | Glu | Ala | Gly | Leu | Arg | Arg | Arg | Lys | Gly | Pro | Thr | Lys | Thr | Pro | Glu | |
| | | | | | 100 | | | | 105 | | | 110 | | | | |
| Pro | Glu | Ser | Ser | Glu | Ala | Pro | Gln | Asp | Pro | Leu | Asn | Trp | Phe | Gly | Ile | |
| | | | | | 115 | | | | 120 | | | 125 | | | | |
| Leu | Val | Pro | His | Ser | Leu | Arg | Gln | Ala | Gln | Ala | Ser | Phe | Arg | Asp | Gly | |
| | | | | | 130 | | | | 135 | | | 140 | | | | |
| Leu | Gln | Leu | Ala | Ala | Asp | Ile | Ala | Ser | Leu | Gln | Asn | Arg | Ile | Asp | Trp | |
| | | | | | 145 | | | | 150 | | | 155 | | | 160 | |
| Gly | Arg | Arg | Ser | Gln | Leu | Arg | Gly | Leu | Gln | Glu | Lys | Leu | Lys | Gln | Leu | Glu |
| | | | | | | 165 | | | | 170 | | | 175 | | | |
| Pro | Gly | Ala | Ala | * | | | | | | | | | | | | |
| | | | | | 180 | | | | | | | | | | | |

<210> 1288
<211> 216
<212>Amino acid
<213> Homo sapiens

<400> 1288

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| His | Ser | Asp | Val | Gly | Ala | Ala | Thr | Ala | Val | Leu | Pro | Leu | Leu | Thr | Ala |
| 1 | | | | | 5 | | | | 10 | | | | | 15 | |
| Val | Leu | Gly | Val | Thr | Val | Val | Thr | Arg | Arg | Asp | Thr | Glu | Gly | Pro | Gly |
| | | | | | | 20 | | | 25 | | | 30 | | | |
| Arg | Ala | Ala | Leu | Val | His | Leu | Thr | Gly | Ser | Pro | Arg | Gln | Lys | Val | Gly |
| | | | | | 35 | | | 40 | | | | 45 | | | |
| Thr | Ser | Gly | Arg | Glu | Gly | Leu | Pro | Gly | Leu | Gly | Ala | Ser | Cys | Ala | Glu |
| | | | | | 50 | | | 55 | | | 60 | | | | |
| Ser | Glu | Leu | Glu | Arg | Glu | Thr | Gln | Glu | Pro | Arg | Ser | Arg | Gly | Arg | Cys |
| | | | | | 65 | | | 70 | | | 75 | | | 80 | |
| Ile | Phe | Gly | Ala | Ala | Arg | Trp | Arg | Gln | Val | Pro | Leu | Ala | Ser | Pro | Gln |
| | | | | | | 85 | | | 90 | | | 95 | | | |
| Arg | Pro | Phe | Leu | Leu | Ser | Pro | Gly | Pro | Arg | Leu | His | Arg | Met | Gly | Leu |
| | | | | | | 100 | | | 105 | | | 110 | | | |
| Pro | Val | Ser | Trp | Ala | Pro | Pro | Ala | Leu | Trp | Val | Leu | Gly | Cys | Cys | Ala |
| | | | | | | 115 | | | 120 | | | 125 | | | |
| Leu | Leu | Leu | Ser | Leu | Trp | Ala | Leu | Cys | Thr | Ala | Cys | Arg | Arg | Pro | Glu |
| | | | | | | 130 | | | 135 | | | 140 | | | |
| Asp | Ala | Val | Ala | Pro | Arg | Lys | Arg | Ala | Arg | Arg | Gln | Arg | Ala | Arg | Leu |
| | | | | | | 145 | | | 150 | | | 155 | | | 160 |
| Gln | Gly | Ser | Ala | Thr | Ala | Ala | Glu | Ala | Val | Ser | Ala | Lys | Leu | Ser | Arg |
| | | | | | | | 165 | | | 170 | | | 175 | | |
| Gly | Pro | Gly | Trp | Gly | Pro | Gln | Gly | Thr | Asp | Gln | Pro | Ser | Ser | Pro | Pro |

| | | | |
|---------------------------------|-----|-----|-----|
| Val Pro Thr Glu Ala Asp Pro Pro | 180 | 185 | 190 |
| Leu Leu Pro Gln Gln Val Gly His | 195 | 200 | 205 |
| Gln Thr Ala Arg Ala Ala Pro Gly | 210 | 215 | 216 |

<210> 1289
<211> 148
<212> Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(148)
<223> X = any amino acid or stop code

| | |
|---|------------|
| Leu Thr Gly Pro Gly Gln Arg Leu Ala Gly Thr Thr Glu Gly Pro Arg | <400> 1289 |
| 1 5 10 15 | |
| Arg Cys Arg Gly Ser Ser Gln Ala Pro Thr Pro Thr Trp Lys Leu Val | |
| 20 25 30 | |
| Asp Thr Arg Leu Cys Ala Ala Ala Pro Trp Leu Ala Ser Arg Ala Pro | |
| 35 40 45 | |
| Gly His Tyr Ser Gln Met Leu Leu Val Asn Xaa Pro Cys Arg Lys Asp | |
| 50 55 60 | |
| Trp Leu Val Ser Lys Trp Met Arg Thr Pro Val Cys Gly Gln Ser Pro | |
| 65 70 75 80 | |
| Ala Met Thr Asp Arg Pro Arg Ser Glu Ala Gly Arg Asp His Arg Arg | |
| 85 90 95 | |
| Ala Lys Ala Leu Pro Gly Leu Ile Pro Gly Ser Asn Pro Asn Leu Glu | |
| 100 105 110 | |
| Ala Cys Gly His Gln Ala Leu Cys Ser Ser Val Ala Ser Val Gln | |
| 115 120 125 | |
| Gly Pro Trp Pro Leu Leu Pro Asn Ala Ser Ser Pro Pro Thr Pro Gly | |
| 130 135 140 | |
| Gln Pro Gln Pro | |
| 145 148 | |

<210> 1290
<211> 170
<212> Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(170)
<223> X = any amino acid or stop code

| | |
|---|------------|
| Lys His Arg Leu Cys Ser Leu Glu Gln Leu Met Thr Leu Ile Ser Ala | <400> 1290 |
| 1 5 10 15 | |
| Ala Arg Glu Tyr Glu Ile Glu Phe Ile Tyr Ala Ile Ser Pro Gly Leu | |
| 20 25 30 | |
| Asp Ile Thr Phe Ser Asn Pro Lys Glu Val Ser Thr Leu Lys Arg Lys | |

| | | |
|---|-----|-----|
| 35 | 40 | 45 |
| Leu Asp Gln Val Ser Gln Phe Gly Cys Arg Ser Phe Ala Leu Leu Phe | | |
| 50 | 55 | 60 |
| Asp Asp Ile Asp His Asn Met Cys Ala Ala Asp Lys Glu Val Phe Ser | | |
| 65 | 70 | 75 |
| Ser Phe Ala His Ala Gln Val Ser Ile Thr Asn Glu Ile Tyr Gln Tyr | | 80 |
| 85 | 90 | 95 |
| Leu Gly Glu Pro Glu Thr Phe Leu Phe Cys Pro Thr Glu Tyr Cys Ile | | |
| 100 | 105 | 110 |
| Xaa Trp Leu Tyr Ile Xaa Leu Val Phe Leu Glu Tyr Ile Thr Tyr Lys | | |
| 115 | 120 | 125 |
| Gly Pro Trp Ala Pro Phe Ser Leu His Phe Pro Pro Pro Leu Val Cys | | |
| 130 | 135 | 140 |
| Lys Ser Arg Asn Leu Phe Leu Glu Asp Ile Phe Gln Asp Pro Lys Leu | | |
| 145 | 150 | 155 |
| Glu Lys Phe Xaa Glu Leu Ile Asn Asp Asn | | 160 |
| 165 | 170 | |

<210> 1291
<211> 98
<212>Amino acid
<213> Homo sapiens

| | | | |
|---|----|----|----|
| <400> 1291 | | | |
| Thr Ser Ala Leu Thr Gln Gly Leu Glu Arg Ile Pro Asp Gln Leu Gly | | | |
| 1 | 5 | 10 | 15 |
| Tyr Leu Val Leu Ser Glu Gly Ala Val Leu Ala Ser Ser Gly Asp Leu | | | |
| 20 | 25 | 30 | |
| Glu Asn Asp Glu Gln Ala Ala Ser Ala Ile Ser Glu Leu Val Ser Thr | | | |
| 35 | 40 | 45 | |
| Ala Cys Gly Phe Arg Leu His Arg Gly Met Asn Val Pro Phe Lys Arg | | | |
| 50 | 55 | 60 | |
| Leu Ser Val Val Phe Gly Glu His Thr Leu Leu Val Thr Val Ser Gly | | | |
| 65 | 70 | 75 | 80 |
| Gln Arg Val Phe Val Val Lys Arg Gln Asn Arg Gly Arg Glu Pro Ile | | | |
| 85 | 90 | 95 | |
| Asp Val | | | |
| 98 | | | |

<210> 1292
<211> 142
<212>Amino acid
<213> Homo sapiens

| | | | |
|---|----|----|----|
| <400> 1292 | | | |
| Ala Lys Arg Ala Glu Arg Thr Ser Arg Leu Gln Gly Leu Gln His Pro | | | |
| 1 | 5 | 10 | 15 |
| Ser Pro Pro Tyr Pro Pro Ala Thr Leu Gly Val Thr Pro Gly Gln Asp | | | |
| 20 | 25 | 30 | |
| Arg Thr Leu Gln Leu Gln His Gln Cys Pro Ala Gly Arg Lys Ser Arg | | | |
| 35 | 40 | 45 | |
| Lys Lys Lys Ser Lys Ala Thr Gln Leu Ser Pro Glu Asp Arg Val Glu | | | |
| 50 | 55 | 60 | |
| Asp Ala Leu Pro Pro Ser Lys Ala Pro Ser Arg Thr Arg Arg Ala Lys | | | |

| | | | |
|---|-----|-----|-----|
| 65 | 70 | 75 | 80 |
| Arg Asp Leu Pro Lys Arg Thr Ala Thr Gln Arg Pro Glu Gly Thr Ser | | | |
| 85 | 90 | 95 | |
| Leu Gln Gln Asp Pro Glu Ala Pro Thr Val Pro Lys Lys Gly Arg Arg | | | |
| 100 | 105 | 110 | |
| Lys Gly Arg Gln Ala Ala Ser Gly His Cys Arg Pro Arg Lys Val Lys | | | |
| 115 | 120 | 125 | |
| Ala Asp Ile Pro Ser Leu Glu Pro Glu Gly Thr Ser Ala Ser | | | |
| 130 | 135 | 140 | 142 |

<210> 1293
 <211> 89
 <212>Amino acid
 <213> Homo sapiens

 <220>
 <221> misc_feature
 <222> (1) ... (89)
 <223> X = any amino acid or stop code

| | | | |
|---|----|----|----|
| <400> 1293 | | | |
| Arg Lys Ser Ser Trp Leu Gly Ala Val Ala His Ala Cys Asn Pro Ser | | | |
| 1 | 5 | 10 | 15 |
| Ser Leu Gly Gly Pro Gly Arg Gln Ile Thr Arg Ser Gly Val Arg Asp | | | |
| 20 | 25 | 30 | |
| Gln Pro Gly Gln Tyr Gly Glu Thr Pro Ser Leu Leu Lys Ile Gln Thr | | | |
| 35 | 40 | 45 | |
| Leu Ala Gly Arg Gly Gly Ala Cys Leu Xaa Ser His Ile Leu Arg Arg | | | |
| 50 | 55 | 60 | |
| Leu Arg Gln Lys Asn Arg Leu Asn Leu Gly Gly Arg Gly Cys Ser Glu | | | |
| 65 | 70 | 75 | 80 |
| Leu Arg Ser Arg His Cys Ala Pro Ala | | | |
| 85 | 89 | | |

<210> 1294
 <211> 80
 <212>Amino acid
 <213> Homo sapiens

| | | | |
|---|----|----|----|
| <400> 1294 | | | |
| Ala Trp Asn Ser Ala Arg Gly Ala Val Ser Pro Leu Trp Val Pro Gly | | | |
| 1 | 5 | 10 | 15 |
| Cys Phe Leu Thr Leu Ser Val Thr Trp Ile Gly Ala Ala Pro Leu Ile | | | |
| 20 | 25 | 30 | |
| Leu Ser Arg Ile Val Gly Gly Trp Glu Cys Glu Lys His Ser Gln Pro | | | |
| 35 | 40 | 45 | |
| Trp Gln Val Leu Val Ala Ser Arg Gly Arg Ala Val Cys Gly Gly Val | | | |
| 50 | 55 | 60 | |
| Leu Val His Pro Gln Trp Val Leu Thr Ala Ala His Cys Ile Arg Lys | | | |
| 65 | 70 | 75 | 80 |

<210> 1295
<211> 281
<212>Amino acid
<213> Homo sapiens

<400> 1295
Ala Glu Met Ala Asp Asp Leu Gly Asp Glu Trp Trp Glu Asn Gln Pro
1 5 10 15
Thr Gly Ala Gly Ser Ser Pro Glu Ala Ser Asp Gly Glu Gly Glu Gly
20 25 30
Asp Thr Glu Val Met Gln Gln Glu Thr Val Pro Val Pro Val Pro Ser
35 40 45
Glu Lys Thr Lys Gln Pro Lys Glu Cys Phe Leu Ile Gln Pro Lys Glu
50 55 60
Arg Lys Glu Asn Thr Thr Lys Thr Arg Lys Arg Arg Lys Lys Ile
65 70 75 80
Thr Asp Val Leu Ala Lys Ser Glu Pro Lys Pro Gly Leu Pro Glu Asp
85 90 95
Leu Gln Lys Leu Met Lys Asp Tyr Tyr Ser Ser Arg Arg Leu Val Ile
100 105 110
Glu Leu Glu Leu Asn Leu Pro Asp Ser Cys Phe Leu Lys Ala Asn
115 120 125
Asp Leu Thr His Ser Leu Ser Ser Tyr Leu Lys Glu Ile Cys Pro Lys
130 135 140
Trp Val Lys Leu Arg Lys Asn His Ser Glu Lys Lys Ser Val Leu Met
145 150 155 160
Leu Ile Ile Cys Ser Ser Ala Val Arg Ala Leu Glu Leu Ile Arg Ser
165 170 175
Met Thr Ala Phe Arg Gly Asp Gly Lys Val Ile Lys Leu Phe Ala Lys
180 185 190
His Ile Lys Val Gln Ala Gln Val Lys Leu Leu Glu Lys Arg Val Val
195 200 205
His Leu Gly Val Gly Thr Pro Gly Arg Ile Lys Glu Leu Val Lys Gln
210 215 220
Gly Gly Leu Asn Leu Ser Pro Leu Lys Phe Leu Val Phe Asp Trp Asn
225 230 235 240
Trp Arg Asp Gln Lys Leu Arg Arg Met Met Asp Ile Pro Glu Ile Arg
245 250 255
Lys Glu Val Phe Glu Leu Leu Glu Met Gly Val Leu Ser Leu Cys Lys
260 265 270
Ser Glu Ser Leu Lys Leu Gly Leu Phe
275 280 281

<210> 1296
<211> 213
<212>Amino acid
<213> Homo sapiens

<400> 1296
Arg Pro Gly Thr Ala Ile Trp Val Val Glu Cys Glu His Gly Arg Pro
1 5 10 15
Ile Ala Glu Ser Glu Gly Gln Glu Gly Arg Gly His Ser Pro Pro Gly
20 25 30
Pro Cys Ser Val Ala Gly Phe Leu Arg Gly Arg Leu Gly Arg Asn Leu
35 40 45

Glu Ile Met Gly Ser Thr Trp Gly Ser Pro Gly Trp Val Arg Leu Ala
 50 55 60
 Leu Cys Leu Thr Gly Leu Val Leu Ser Leu Tyr Ala Leu His Val Lys
 65 70 75 80
 Ala Ala Arg Ala Arg Asp Arg Asp Tyr Arg Ala Leu Cys Asp Val Gly
 85 90 95
 Thr Ala Ile Ser Cys Ser Arg Val Phe Ser Ser Arg Trp Gly Arg Gly
 100 105 110
 Phe Gly Leu Val Glu His Val Leu Gly Gln Asp Ser Ile Leu Asn Gln
 115 120 125
 Ser Asn Ser Ile Phe Gly Cys Ile Phe Tyr Thr Leu Gln Leu Leu Leu
 130 135 140
 Gly Cys Leu Arg Thr Arg Trp Ala Ser Val Leu Met Leu Leu Ser Ser
 145 150 155 160
 Leu Val Ser Leu Ala Gly Ser Val Tyr Leu Ala Trp Ile Leu Phe Phe
 165 170 175
 Val Leu Tyr Asp Phe Cys Ile Val Cys Ile Thr Thr Tyr Ala Ile Asn
 180 185 190
 Val Ser Leu Met Trp Leu Ser Phe Arg Lys Val Gln Glu Pro Gln Gly
 195 200 205
 Lys Ala Lys Arg His
 210 213

<210> 1297
 <211> 353
 <212>Amino acid
 <213> Homo sapiens

<400> 1297
 Glu Ser Pro Ala Pro Pro Ala Phe Arg Pro Ala Met Ala Ala Val Ala
 1 5 10 15
 Leu Met Pro Pro Pro Leu Leu Leu Leu Leu Leu Ala Ser Pro Pro
 20 25 30
 Ala Ala Ser Ala Pro Ser Ala Arg Asp Pro Phe Ala Pro Gln Leu Gly
 35 40 45
 Asp Thr Gln Asn Cys Gln Leu Arg Cys Arg Asp Arg Asp Leu Gly Pro
 50 55 60
 Gln Pro Ser Gln Ala Gly Leu Glu Gly Ala Ser Gln Glu Ser Pro Tyr Asp
 65 70 75 80
 Arg Ala Val Leu Ile Ser Ala Cys Glu Arg Gly Cys Arg Leu Phe Ser
 85 90 95
 Ile Cys Arg Phe Val Ala Arg Ser Ser Lys Pro Asn Ala Thr Gln Thr
 100 105 110
 Glu Cys Glu Ala Ala Cys Val Glu Ala Tyr Val Lys Glu Ala Glu Gln
 115 120 125
 Gln Ala Cys Ser His Gly Cys Trp Ser Gln Pro Ala Glu Pro Glu Pro
 130 135 140
 Glu Gln Lys Arg Lys Val Leu Glu Ala Pro Ser Gly Ala Leu Ser Leu
 145 150 155 160
 Leu Asp Leu Phe Ser Thr Leu Cys Asn Asp Leu Val Asn Ser Ala Gln
 165 170 175
 Gly Phe Val Ser Ser Thr Trp Thr Tyr Tyr Leu Gln Thr Asp Asn Gly
 180 185 190
 Lys Val Val Phe Gln Thr Gln Pro Ile Val Glu Ser Leu Gly Phe
 195 200 205
 Gln Gly Gly Arg Leu Gln Arg Val Glu Val Thr Trp Arg Gly Ser His
 210 215 220
 Pro Glu Ala Leu Glu Val His Val Asp Pro Val Gly Pro Leu Asp Lys
 225 230 235 240

Val Arg Lys Ala Lys Ile Arg Val Lys Thr Ser Ser Lys Ala Lys Val
 245 250 255
 Glu Ser Glu Pro Gln Asp Asn Asp Phe Leu Ser Cys Met Ser Arg
 260 265 270
 Arg Ser Gly Leu Pro Arg Trp Ile Leu Ala Cys Cys Leu Phe Leu Ser
 275 280 285
 Val Leu Val Met Leu Trp Leu Ser Cys Ser Thr Leu Val Thr Ala Pro
 290 295 300
 Gly Gln His Leu Lys Phe Gln Pro Leu Thr Leu Glu Gln His Lys Gly
 305 310 315 320
 Phe Met Met Glu Pro Asp Trp Pro Leu Tyr Pro Pro Pro Ser His Ala
 325 330 335
 Cys Glu Asp Ser Leu Pro Pro Tyr Lys Leu Lys Leu Asp Leu Thr Lys
 340 345 350
 Leu
 353

<210> 1298
<211> 161
<212>Amino acid
<213> Homo sapiens

<400> 1298
 Phe Pro Glu Leu Gly Thr Ser Leu Ser Ala Met Arg Phe Leu Ala Ala
 1 5 10 15
 Thr Phe Leu Leu Ala Leu Ser Thr Ala Ala Gln Ala Glu Pro Val
 20 25 30
 Gln Phe Lys Asp Cys Gly Ser Val Asp Gly Val Ile Lys Glu Val Asn
 35 40 45
 Val Ser Pro Cys Pro Thr Gln Pro Cys Gln Leu Ser Lys Gly Gln Ser
 50 55 60
 Tyr Ser Val Asn Val Thr Phe Thr Ser Asn Ile Gln Ser Lys Ser Ser
 65 70 75 80
 Lys Ala Val Val His Gly Ile Leu Met Gly Val Pro Val Pro Phe Pro
 85 90 95
 Ile Pro Glu Pro Asp Gly Cys Lys Ser Gly Ile Asn Cys Pro Ile Gln
 100 105 110
 Lys Asp Lys Thr Tyr Ser Tyr Leu Asn Lys Leu Pro Val Lys Ser Glu
 115 120 125
 Tyr Pro Ser Ile Lys Leu Val Val Glu Trp Gln Leu Gln Asp Asp Lys
 130 135 140
 Asn Gln Ser Leu Phe Cys Trp Glu Ile Pro Val Gln Ile Val Ser His
 145 150 155 160
 Leu
 161

<210> 1298
<211> 128
<212>Amino acid
<213> Homo sapiens

<400> 1299
 Ala Pro Glu Thr Phe Arg Cys Val Trp Arg Ile Gln Gly Leu Thr Phe
 1 5 10 15

| | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ile | Ala | Phe | Thr | Glu | Leu | Gln | Ala | Lys | Val | Ile | Asp | Thr | Gln | Gln | Lys | |
| 20 | | | | | | | 25 | | | | | | 30 | | | |
| Val | Lys | Leu | Ala | Asp | Ile | Gln | Ile | Glu | Gln | Leu | Asn | Arg | Thr | Lys | Lys | |
| 35 | | | | | | | 40 | | | | | | 45 | | | |
| His | Ala | His | Leu | Thr | Asp | Thr | Glu | Ile | Met | Thr | Leu | Val | Asp | Glu | Thr | |
| 50 | | | | | | | 55 | | | | | | 60 | | | |
| Asn | Met | Tyr | Glu | Gly | Val | Gly | Arg | Met | Phe | Ile | Leu | Gln | Ser | Lys | Glu | |
| 65 | | | | | | | 70 | | | | | | 75 | | 80 | |
| Ala | Ile | His | Ser | Gln | Leu | Leu | Glu | Gln | Lys | Ile | Ala | Glu | Glu | Lys | | |
| 85 | | | | | | | 90 | | | | | | 95 | | | |
| Ile | Lys | Glu | Leu | Glu | Gln | Lys | Lys | Ser | Tyr | Leu | Glu | Arg | Ser | Val | Lys | |
| 100 | | | | | | | 105 | | | | | | 110 | | | |
| Glu | Ala | Ala | Glu | Asp | Asn | Ile | Arg | Glu | Met | Leu | Met | Ala | Arg | Arg | Ala | Gln |
| 115 | | | | | | | 120 | | | | | | 125 | | 128 | |

<210> 1300
<211> 265
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(265)
<223> X = any amino acid or stop code

| | | | | | | | | | | | | | | | |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <400> 1300 | | | | | | | | | | | | | | | |
| His | Ser | Leu | Leu | Leu | Gly | Thr | Arg | Val | Arg | Asp | Ala | Ser | Ser | Lys | Ile |
| 1 | | | | | | | 5 | | | | | 10 | | | 15 |
| Gln | Gly | Glu | Tyr | Thr | Leu | Thr | Leu | Arg | Lys | Gly | Gly | Asn | Asn | Lys | Leu |
| 20 | | | | | | | 25 | | | | | | | 30 | |
| Ser | Arg | Val | Phe | His | Arg | Asp | Gly | His | Tyr | Gly | Phe | Ser | Glu | Pro | Leu |
| 35 | | | | | | | 40 | | | | | | | 45 | |
| Thr | Phe | Cys | Ser | Val | Val | Asp | Leu | Ile | Asn | His | Tyr | Arg | His | Glu | Ser |
| 50 | | | | | | | 55 | | | | | | | 60 | |
| Leu | Ala | Gln | Tyr | Asn | Ala | Lys | Leu | Asp | Thr | Arg | Leu | Leu | Tyr | Pro | Val |
| 65 | | | | | | | 70 | | | | | | | 75 | 80 |
| Ser | Lys | Tyr | Gln | Gln | Val | Arg | Ala | Gly | Leu | Gly | Ala | Arg | Glu | Gly | Ser |
| 85 | | | | | | | 90 | | | | | | | 95 | |
| Thr | Trp | Leu | Ala | Pro | Gly | Leu | Ser | Phe | Leu | Gly | Arg | Pro | Asp | Gln | Ala |
| 100 | | | | | | | 105 | | | | | | | 110 | |
| Met | His | Leu | Pro | Ser | Phe | Arg | His | Val | Ser | Pro | Asp | Gln | Ile | Val | Lys |
| 115 | | | | | | | 120 | | | | | | | 125 | |
| Glu | Asp | Ser | Val | Glu | Ala | Val | Gly | Ala | Gln | Leu | Lys | Val | Tyr | His | Gln |
| 130 | | | | | | | 135 | | | | | | | 140 | |
| Gln | Tyr | Gln | Asp | Lys | Ser | Arg | Glu | Tyr | Asp | Gln | Leu | Tyr | Glu | Gly | Tyr |
| 145 | | | | | | | 150 | | | | | | | 155 | 160 |
| Thr | Arg | Thr | Ser | Gln | Glu | Leu | Gln | Met | Lys | Arg | Thr | Ala | Ile | Glu | Ala |
| 165 | | | | | | | 170 | | | | | | | 175 | |
| Phe | Asn | Glu | Thr | Ile | Lys | Ile | Phe | Glu | Glu | Gln | Gly | Gln | Thr | Gln | Glu |
| 180 | | | | | | | 185 | | | | | | | 190 | |
| Lys | Cys | Ser | Lys | Glu | Tyr | Leu | Glu | Arg | Phe | Arg | Arg | Glu | Gly | Asn | Gln |
| 195 | | | | | | | 200 | | | | | | | 205 | |
| Thr | Lys | Glu | Met | Gln | Arg | Ile | Leu | Leu | Asn | Ser | Glu | Arg | Leu | Lys | Ser |
| 210 | | | | | | | 215 | | | | | | | 220 | |
| Arg | Ile | Ala | Glu | Ile | His | Glu | Ser | Pro | His | Arg | Ser | Trp | Glu | Gln | Gln |
| 225 | | | | | | | 230 | | | | | | | 235 | 240 |
| Leu | Leu | Val | Pro | Arg | Ala | Ser | Asp | Asn | Lys | Arg | Asp | Ile | Asp | Lys | Pro |

| | | |
|-------------------------------------|-----|-----|
| 245 | 250 | 255 |
| His Xaa Thr Ser Leu Lys Pro Asp Leu | | |
| 260 | 265 | |

<210> 1301
<211> 490
<212>Amino acid
<213> Homo sapiens

<400> 1301
Ala Ala Ala Ala Ala Gly Arg Gly Arg Ser Ser Gly Arg Arg Arg Arg
1 5 10 15
Arg Arg Pro Gly Ala Leu Phe Ala Ser Leu Gly Val Leu Leu Gly Pro
20 25 30
Arg Pro Pro Pro Gly Ile Pro Arg Thr Arg Ala Cys Ser Met Gly Gly
35 40 45
Val Gly Glu Pro Gly Pro Arg Glu Gly Pro Ala Gln Pro Gly Ala Pro
50 55 60
Leu Pro Thr Phe Cys Trp Glu Gln Ile Arg Ala His Asp Gln Pro Gly
65 70 75 80
Asp Lys Trp Leu Val Ile Glu Arg Arg Val Tyr Asp Ile Ser Arg Trp
85 90 95
Ala Gln Arg His Pro Gly Gly Ser Arg Leu Ile Gly His His Gly Ala
100 105 110
Glu Asp Ala Thr Asp Ala Phe Arg Ala Phe His Gln Asp Leu Asn Phe
115 120 125
Val Arg Lys Phe Leu Gln Pro Leu Leu Ile Gly Glu Leu Ala Pro Glu
130 135 140
Glu Pro Ser Gln Asp Gly Pro Leu Asn Ala Gln Leu Val Glu Asp Phe
145 150 155 160
Arg Ala Leu His Gln Ala Ala Glu Asp Met Lys Leu Phe Asp Ala Ser
165 170 175
Pro Thr Phe Phe Ala Phe Leu Leu Gly His Ile Leu Ala Met Glu Val
180 185 190
Leu Ala Trp Leu Leu Ile Tyr Leu Leu Gly Pro Gly Trp Val Pro Ser
195 200 205
Ala Leu Ala Ala Phe Ile Leu Ala Ile Ser Gln Ala Gln Ser Trp Cys
210 215 220
Leu Gln His Asp Leu Gly His Ala Ser Ile Phe Lys Lys Ser Trp Trp
225 230 235 240
Asn His Val Ala Gln Lys Phe Val Met Gly Gln Leu Lys Gly Phe Ser
245 250 255
Ala His Trp Trp Asn Phe Arg His Phe Gln His His Ala Lys Pro Asn
260 265 270
Ile Phe His Lys Asp Pro Asp Val Thr Val Ala Pro Val Phe Leu Leu
275 280 285
Gly Glu Ser Ser Val Glu Tyr Gly Lys Lys Arg Arg Tyr Leu Pro
290 295 300
Tyr Asn Gln Gln His Leu Tyr Phe Phe Leu Ile Gly Pro Pro Leu Leu
305 310 315 320
Thr Leu Val Asn Phe Glu Val Glu Asn Leu Ala Tyr Met Leu Val Cys
325 330 335
Met Gln Trp Ala Asp Leu Leu Trp Ala Ala Ser Phe Tyr Ala Arg Phe
340 345 350
Phe Leu Ser Tyr Leu Pro Phe Tyr Gly Val Pro Gly Val Leu Leu Phe
355 360 365
Phe Val Ala Val Arg Val Leu Glu Ser His Trp Phe Val Trp Ile Thr
370 375 380
Gln Met Asn His Ile Pro Lys Glu Ile Gly His Glu Lys His Arg Asp

| | | | |
|---|-----|-----|-----|
| 385 | 390 | 395 | 400 |
| Trp Val Ser Ser Gln Leu Ala Ala Thr Cys Asn Val Glu Pro Ser Leu | | | |
| 405 | 410 | 415 | |
| Phe Thr Asn Trp Phe Ser Gly His Leu Asn Phe Gln Ile Glu His His | | | |
| 420 | 425 | 430 | |
| Leu Phe Pro Arg Met Pro Arg His Asn Tyr Ser Arg Val Ala Pro Leu | | | |
| 435 | 440 | 445 | |
| Val Lys Ser Leu Cys Ala Lys His Gly Leu Ser Tyr Glu Val Lys Pro | | | |
| 450 | 455 | 460 | |
| Phe Leu Thr Ala Leu Val Asp Ile Val Arg Ser Leu Lys Lys Ser Gly | | | |
| 465 | 470 | 475 | 480 |
| Asp Ile Trp Leu Asp Ala Tyr Leu His Gln | | | |
| 485 | 490 | | |

<210> 1302
<211> 110
<212>Amino acid
<213> Homo sapiens

| | | | |
|---|-----|-----|----|
| <400> 1302 | | | |
| Lys Ser Arg Ala Thr Arg Leu Arg Glu Ser Ala Glu Met Thr Gly Phe | | | |
| 1 | 5 | 10 | 15 |
| Leu Leu Pro Pro Ala Ser Arg Gly Thr Arg Arg Ser Cys Ser Arg Ser | | | |
| 20 | 25 | 30 | |
| Arg Lys Arg Gln Thr Arg Arg Arg Arg Asn Pro Ser Ser Phe Val Ala | | | |
| 35 | 40 | 45 | |
| Ser Cys Pro Thr Leu Leu Pro Phe Ala Cys Val Pro Gly Ala Ser Pro | | | |
| 50 | 55 | 60 | |
| Thr Thr Leu Ala Phe Pro Pro Val Val Leu Thr Gly Pro Ser Thr Asp | | | |
| 65 | 70 | 75 | 80 |
| Gly Ile Pro Phe Ala Leu Ser Leu Gln Arg Val Pro Phe Val Leu Pro | | | |
| 85 | 90 | 95 | |
| Ser Pro Gln Val Ala Ser Leu Pro Leu Gly His Ser Arg Gly | | | |
| 100 | 105 | 110 | |

<210> 1303
<211> 138
<212>Amino acid
<213> Homo sapiens

| | | | |
|---|----|----|----|
| <400> 1303 | | | |
| Ile Gln Tyr Arg Ser Asp Leu Glu Leu His Ser Ile Thr Met Lys Lys | | | |
| 1 | 5 | 10 | 15 |
| Ser Gly Val Leu Phe Leu Leu Gly Ile Ile Leu Leu Val Leu Ile Gly | | | |
| 20 | 25 | 30 | |
| Val Gln Gly Thr Pro Val Val Arg Lys Gly Arg Cys Ser Cys Ile Ser | | | |
| 35 | 40 | 45 | |
| Thr Asn Gln Gly Thr Ile His Leu Gln Ser Leu Lys Asp Leu Lys Gln | | | |
| 50 | 55 | 60 | |
| Phe Ala Pro Ser Pro Ser Cys Glu Lys Ile Glu Ile Ile Ala Thr Leu | | | |
| 65 | 70 | 75 | 80 |
| Lys Asn Gly Val Gln Thr Cys Leu Asn Pro Asp Ser Ala Asp Val Lys | | | |
| 85 | 90 | 95 | |
| Glu Leu Ile Lys Lys Trp Glu Lys Gln Val Ser Gln Lys Lys Gln | | | |

| | | | |
|-----------------------------|-----|-----|-----|
| Lys Asn Gly | 100 | 105 | 110 |
| Lys Lys His Gln Lys | | | |
| 115 | 120 | 125 | |
| Ser Gln Arg Ser Arg Gln Lys | | | |
| 130 | 135 | 138 | |

<210> 1304
<211> 1000
<212>Amino acid
<213> Homo sapiens

<400> 1304

| | | | | |
|---|-----|-----|-----|-----|
| Ile Pro Gly Ser Thr Ile Ser Cys Arg Gly Cys Cys Gly Lys Trp Pro | 1 | 5 | 10 | 15 |
| Val Gln Glu Ala Asp Pro Pro Arg Ala Ala Leu Arg Gly Arg Phe Pro | 20 | 25 | 30 | |
| Ala Leu Leu Thr Arg His Cys Pro Ser Pro Arg Ala Glu Lys Glu Lys | 35 | 40 | 45 | |
| Arg Ser Leu Arg Arg Cys Gly Cys Arg Pro Leu Leu Val Glu Leu Ala | 50 | 55 | 60 | |
| Gly Pro Ala Gly Gln Ala Val Glu Val Leu Pro His Phe Glu Ser Leu | 65 | 70 | 75 | 80 |
| Gly Lys Gln Glu Lys Ile Pro Asn Lys Met Ser Ala Phe Arg Asn His | 85 | 90 | 95 | |
| Cys Pro His Leu Asp Ser Val Gly Glu Ile Thr Lys Glu Asp Leu Ile | 100 | 105 | 110 | |
| Gln Lys Ser Leu Gly Thr Cys Gln Asp Cys Lys Val Gln Gly Pro Asn | 115 | 120 | 125 | |
| Leu Trp Ala Cys Leu Glu Asn Arg Cys Ser Tyr Val Gly Cys Gly Glu | 130 | 135 | 140 | |
| Ser Gln Val Asp His Ser Thr Ile His Ser Gln Glu Thr Lys His Tyr | 145 | 150 | 155 | 160 |
| Leu Thr Val Asn Leu Thr Thr Leu Arg Val Trp Cys Tyr Ala Cys Ser | 165 | 170 | 175 | |
| Lys Glu Val Phe Leu Asp Arg Lys Leu Gly Thr Gln Pro Ser Leu Pro | 180 | 185 | 190 | |
| His Val Arg Gln Pro His Gln Ile Gln Glu Asn Ser Val Gln Asp Phe | 195 | 200 | 205 | |
| Lys Ile Pro Ser Asn Thr Thr Leu Lys Thr Pro Leu Val Ala Val Phe | 210 | 215 | 220 | |
| Asp Asp Leu Asp Ile Glu Ala Asp Glu Glu Asp Glu Leu Arg Ala Arg | 225 | 230 | 235 | 240 |
| Gly Leu Thr Gly Leu Lys Asn Ile Gly Asn Thr Cys Tyr Met Asn Ala | 245 | 250 | 255 | |
| Ala Leu Gln Ala Leu Ser Asn Cys Pro Pro Leu Thr Gln Phe Phe Leu | 260 | 265 | 270 | |
| Asp Cys Gly Gly Leu Ala Arg Thr Asp Lys Lys Pro Ala Ile Cys Lys | 275 | 280 | 285 | |
| Ser Tyr Leu Lys Leu Met Thr Glu Leu Trp Tyr Lys Ser Arg Pro Gly | 290 | 295 | 300 | |
| Ser Val Val Pro Thr Thr Leu Phe Gln Gly Ile Lys Thr Val Asn Pro | 305 | 310 | 315 | 320 |
| Thr Phe Arg Gly Tyr Ser Gln Gln Asp Ala Gln Glu Phe Leu Arg Cys | 325 | 330 | 335 | |
| Leu Met Asp Leu Leu His Glu Glu Leu Lys Glu Gln Val Met Glu Val | 340 | 345 | 350 | |
| Glu Glu Asp Pro Gln Thr Ile Thr Glu Glu Thr Met Glu Glu Asp | 355 | 360 | 365 | |
| Lys Ser Gln Ser Asp Val Asp Phe Gln Ser Cys Glu Ser Cys Ser Asn | | | | |

| | | |
|---|-----|-----|
| 370 | 375 | 380 |
| Ser Asp Arg Ala Glu Asn Glu Asn Gly Ser Arg Cys Phe Ser Glu Asp | 390 | 395 |
| 385 | 390 | 400 |
| Asn Asn Glu Thr Thr Met Leu Ile Gln Asp Asp Glu Asn Asn Ser Glu | 405 | 410 |
| 405 | 410 | 415 |
| Met Ser Lys Asp Trp Gln Lys Glu Lys Met Cys Asn Lys Ile Asn Lys | 420 | 425 |
| 420 | 425 | 430 |
| Val Asn Ser Glu Gly Glu Phe Asp Lys Asp Arg Asp Ser Ile Ser Glu | 435 | 440 |
| 435 | 440 | 445 |
| Thr Val Asp Leu Asn Asn Gln Glu Thr Val Lys Val Gln Ile His Ser | 450 | 455 |
| 450 | 455 | 460 |
| Arg Ala Ser Glu Tyr Ile Thr Asp Val His Ser Asn Asp Leu Ser Thr | 465 | 470 |
| 465 | 470 | 475 |
| Pro Gln Ile Leu Pro Ser Asn Glu Gly Val Asn Pro Arg Leu Ser Ala | 480 | 490 |
| 480 | 490 | 495 |
| Ser Pro Pro Lys Ser Gly Asn Leu Trp Pro Gly Leu Ala Pro Pro His | 500 | 505 |
| 500 | 505 | 510 |
| Lys Lys Ala Gln Ser Ala Ser Pro Lys Arg Lys Lys Gln His Lys Lys | 515 | 520 |
| 515 | 520 | 525 |
| Tyr Arg Ser Val Ile Ser Asp Ile Phe Asp Gly Thr Ile Ile Ser Ser | 530 | 535 |
| 530 | 535 | 540 |
| Val Gln Cys Leu Thr Cys Asp Arg Val Ser Val Thr Leu Glu Thr Phe | 545 | 550 |
| 545 | 550 | 555 |
| Gln Asp Leu Ser Leu Pro Ile Pro Gly Lys Glu Asp Leu Ala Lys Leu | 560 | 565 |
| 560 | 565 | 570 |
| His Ser Ser His Pro Thr Ser Ile Val Lys Ala Gly Ser Cys Gly | 575 | 580 |
| 575 | 580 | 585 |
| Glu Ala Tyr Ala Pro Gln Gly Trp Ile Ala Phe Phe Met Glu Tyr Val | 590 | 595 |
| 590 | 595 | 600 |
| 600 | 605 | |
| Lys Arg Phe Val Val Ser Cys Val Pro Ser Trp Phe Trp Gly Pro Val | 610 | 615 |
| 610 | 615 | 620 |
| Val Thr Leu Gln Asp Cys Leu Ala Ala Phe Phe Ala Arg Asp Glu Leu | 625 | 630 |
| 625 | 630 | 635 |
| Lys Gly Asp Asn Met Tyr Ser Cys Glu Lys Cys Lys Lys Leu Arg Asn | 640 | 645 |
| 640 | 645 | 650 |
| Gly Val Lys Phe Cys Lys Val Gln Asn Phe Pro Glu Ile Leu Cys Ile | 655 | 660 |
| 655 | 660 | 665 |
| 665 | 670 | |
| His Leu Lys Arg Phe Arg His Gln Leu Met Phe Ser Thr Lys Ile Ser | 675 | 680 |
| 675 | 680 | 685 |
| Thr His Val Ser Phe Pro Leu Glu Gly Leu Asp Leu Gln Pro Phe Leu | 690 | 695 |
| 690 | 695 | 700 |
| Ala Lys Asp Ser Pro Ala Gln Ile Val Thr Tyr Asp Leu Leu Ser Val | 705 | 710 |
| 705 | 710 | 715 |
| 715 | 720 | |
| Ile Cys His His Gly Thr Ala Ser Ser Gly His Tyr Ile Ala Tyr Cys | 725 | 730 |
| 725 | 730 | 735 |
| Arg Asn Asn Leu Asn Asn Leu Trp Tyr Glu Phe Asp Asp Gln Ser Val | 740 | 745 |
| 740 | 745 | 750 |
| Thr Glu Val Ser Glu Ser Thr Val Gln Asn Ala Glu Ala Tyr Val Leu | 755 | 760 |
| 755 | 760 | 765 |
| Phe Tyr Arg Lys Ser Ser Glu Glu Ala Gln Lys Glu Arg Arg Arg Ile | 770 | 775 |
| 770 | 775 | 780 |
| Ser Asn Leu Leu Asn Ile Met Glu Pro Ser Leu Leu Gln Phe Tyr Ile | 785 | 790 |
| 785 | 790 | 795 |
| 795 | 800 | |
| Ser Arg Gln Trp Leu Asn Lys Phe Lys Thr Phe Ala Glu Pro Gly Pro | 805 | 810 |
| 805 | 810 | 815 |
| Ile Ser Asn Asn Asp Phe Leu Cys Ile His Gly Gly Val Pro Pro Arg | 820 | 825 |
| 820 | 825 | 830 |
| Lys Ala Gly Tyr Ile Glu Asp Leu Val Leu Met Leu Pro Gln Asn Ile | 835 | 840 |
| 835 | 840 | 845 |
| Trp Asp Asn Leu Tyr Ser Arg Tyr Gly Gly Pro Ala Val Asn His | 850 | 855 |
| 850 | 855 | 860 |
| Leu Tyr Ile Cys His Thr Cys Gln Ile Glu Ala Glu Lys Ile Glu Lys | 865 | 870 |
| 865 | 870 | 875 |
| 875 | 880 | |
| Arg Arg Lys Thr Glu Leu Glu Ile Phe Ile Arg Leu Asn Arg Ala Phe | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|
| Gln | Lys | Glu | Asp | Ser | Pro | Ala | Thr | Phe | Tyr | Cys | Ile | Ser | Met | Gln | Trp |
| 900 | | 900 | | | | | | 905 | | | | | | 910 | |
| Phe | Arg | Glu | Trp | Glu | Ser | Phe | Val | Lys | Gly | Lys | Asp | Gly | Asp | Pro | Pro |
| 915 | | | | | | 915 | | 920 | | | | | 925 | | |
| Gly | Pro | Ile | Asp | Asn | Thr | Lys | Ile | Ala | Val | Thr | Lys | Cys | Gly | Asn | Val |
| 930 | | | | | | 930 | | 935 | | | 940 | | | | |
| Met | Leu | Arg | Gln | Gly | Ala | Asp | Ser | Gly | Gln | Ile | Ser | Glu | Glu | Thr | Trp |
| 945 | | | | | | 945 | | 950 | | | 955 | | | 960 | |
| Asn | Phe | Leu | Gln | Ser | Ile | Tyr | Gly | Gly | Gly | Pro | Glu | Val | Ile | Leu | Arg |
| 965 | | | | | | 965 | | 970 | | | 975 | | | | |
| Pro | Pro | Val | Val | His | Val | Asp | Pro | Asp | Ile | Leu | Gln | Ala | Glu | Glu | Lys |
| 980 | | | | | | 980 | | 985 | | | 990 | | | | |
| Ile | Glu | Val | Glu | Thr | Arg | Ser | Leu | | | | | | | | |
| 995 | | | | | | | | 1000 | | | | | | | |

<210> 1305
<211> 141
<212>Amino acid
<213> Homo sapiens

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------|
| Ser | Pro | Ser | Ala | Ala | Gly | Gly | Leu | Ala | Trp | Val | Ser | Leu | Ala | Leu | Gly |
| 1 | | | | | 5 | | | | | 10 | | | | | 15 |
| Ser | Gly | Ser | Arg | Gly | Arg | Asp | His | Ser | Gly | Ser | Gly | Val | Gly | Thr | Ala |
| | | | | | | | 20 | | | 25 | | | | | 30 |
| Met | Ala | Gly | Ala | Leu | Val | Arg | Lys | Ala | Ala | Asp | Tyr | Val | Arg | Ser | Lys |
| | | | | | | | 35 | | | 40 | | | | | 45 |
| Asp | Phe | Arg | Asp | Tyr | Leu | Met | Ser | Thr | His | Phe | Trp | Gly | Pro | Val | Ala |
| | | | | | | | 50 | | | 55 | | | | | 60 |
| Asn | Trp | Gly | Leu | Pro | Ile | Ala | Ala | Ile | Asn | Asp | Met | Lys | Lys | Ser | Pro |
| | | | | | | | 65 | | | 70 | | | | | 80 |
| Glu | Ile | Ile | Ser | Gly | Arg | Met | Thr | Phe | Ala | Leu | Cys | Cys | Tyr | Ser | Leu |
| | | | | | | | 85 | | | 90 | | | | | 95 |
| Thr | Phe | Met | Arg | Phe | Ala | Tyr | Lys | Val | Gln | Pro | Arg | Asn | Trp | Leu | Leu |
| | | | | | | | 100 | | | 105 | | | | | 110 |
| Phe | Ala | Cys | His | Ala | Thr | Asn | Glu | Val | Ala | Gln | Leu | Ile | Gln | Gly | Gly |
| | | | | | | | 115 | | | 120 | | | | | 125 |
| Arg | Leu | Ile | Lys | His | Glu | Met | Thr | Lys | Thr | Ala | Ser | Ala | | | |
| | | | | | | | 130 | | | 135 | | | | | 140 141 |

<210> 1306
<211> 386
<212>Amino acid
<213> Homo sapiens

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Gly | Ser | Arg | Gln | Ala | Ala | Gly | Thr | Met | Arg | Gly | Gln | Arg | Ser | Leu |
| 1 | | | | | | | 5 | | | 10 | | | | | 15 |
| Leu | Leu | Gly | Pro | Ala | Arg | Leu | Cys | Leu | Arg | Leu | Leu | Leu | Leu | Gly | |
| | | | | | | | 20 | | | 25 | | | | | 30 |
| Tyr | Arg | Arg | Arg | Cys | Pro | Pro | Leu | Leu | Arg | Gly | Leu | Val | Gln | Arg | Trp |
| | | | | | | | 35 | | | 40 | | | | | 45 |
| Arg | Tyr | Gly | Lys | Val | Cys | Leu | Arg | Ser | Leu | Leu | Tyr | Asn | Ser | Phe | Gly |

| | | |
|---|-----|-----|
| Gly Ser Asp Thr Ala Val Asp Ala Ala Phe Glu Pro Val Tyr Trp Leu | 55 | 60 |
| 65 | 70 | 75 |
| Val Asp Asn Val Ile Arg Trp Phe Gly Val Val Phe Val Val Leu Val | | 80 |
| 85 | 90 | 95 |
| Ile Val Leu Thr Gly Ser Ile Val Ala Ile Ala Tyr Leu Cys Val Leu | | |
| 100 | 105 | 110 |
| Pro Leu Ile Leu Arg Thr Tyr Ser Val Pro Arg Leu Cys Trp His Phe | | |
| 115 | 120 | 125 |
| Phe Tyr Ser His Trp Asn Leu Ile Leu Ile Val Phe His Tyr Tyr Gln | | |
| 130 | 135 | 140 |
| Ala Ile Thr Thr Pro Pro Gly Tyr Pro Pro Gln Gly Arg Asn Asp Ile | | |
| 145 | 150 | 155 |
| Ala Thr Val Ser Ile Cys Lys Lys Cys Ile Tyr Pro Lys Pro Ala Arg | | |
| 165 | 170 | 175 |
| Thr His His Cys Ser Ile Cys Asn Arg Cys Val Leu Lys Met Asp His | | |
| 180 | 185 | 190 |
| His Cys Pro Trp Leu Asn Asn Cys Val Gly His Tyr Asn His Arg Tyr | | |
| 195 | 200 | 205 |
| Phe Phe Ser Phe Cys Phe Phe Met Thr Leu Gly Cys Val Tyr Cys Ser | | |
| 210 | 215 | 220 |
| Tyr Gly Ser Trp Asp Leu Phe Arg Glu Ala Tyr Ala Ala Ile Glu Lys | | |
| 225 | 230 | 235 |
| Met Lys Gln Leu Asp Lys Asn Lys Leu Gln Ala Val Ala Asn Gln Thr | | |
| 245 | 250 | 255 |
| Tyr His Gln Thr Pro Pro Pro Thr Phe Ser Phe Arg Glu Arg Met Thr | | |
| 260 | 265 | 270 |
| His Lys Ser Leu Val Tyr Leu Trp Phe Leu Cys Ser Ser Val Ala Leu | | |
| 275 | 280 | 285 |
| Ala Leu Gly Ala Leu Thr Val Trp His Ala Val Leu Ile Ser Arg Gly | | |
| 290 | 295 | 300 |
| Glu Thr Ser Ile Glu Arg His Ile Asn Lys Lys Glu Arg Arg Arg Leu | | |
| 305 | 310 | 315 |
| Gln Ala Lys Gly Arg Val Phe Arg Asn Pro Tyr Asn Tyr Gly Cys Leu | | |
| 325 | 330 | 335 |
| Asp Asn Trp Lys Val Phe Leu Gly Val Asp Thr Gly Arg His Trp Leu | | |
| 340 | 345 | 350 |
| Thr Arg Val Leu Leu Pro Ser Ser His Leu Pro His Gly Asn Gly Met | | |
| 355 | 360 | 365 |
| Ser Trp Glu Pro Pro Pro Trp Val Thr Ala His Ser Ala Ser Val Met | | |
| 370 | 375 | 380 |
| Ala Val | | |
| 385 386 | | |

<210> 1307
 <211> 298
 <212>Amino acid
 <213> Homo sapiens

| | | |
|---|----|----|
| Ala Thr Arg Arg Arg Ala Ala Glu Ala Gly Met Ala Ala Val Leu Gln | | |
| 1 | 5 | 10 |
| Arg Val Glu Arg Leu Ser Asn Arg Val Val Arg Val Leu Gly Cys Asn | | |
| 20 | 25 | 30 |
| Pro Gly Pro Met Thr Leu Gln Gly Thr Asn Thr Tyr Leu Val Gly Thr | | |
| 35 | 40 | 45 |
| Gly Pro Arg Arg Ile Leu Ile Asp Thr Gly Glu Pro Ala Ile Pro Glu | | |
| 50 | 55 | 60 |
| Tyr Ile Ser Cys Leu Lys Gln Ala Leu Thr Glu Phe Asn Thr Ala Ile | | |

| | | | |
|---|-----|-----|-----|
| 65 | 70 | 75 | 80 |
| Gln Glu Ile Val Val Thr His Trp His Arg Asp His Ser Gly Gly Ile | | | |
| 85 | 90 | 95 | |
| Gly Asp Ile Cys Lys Ser Ile Asn Asn Asp Thr Thr Tyr Cys Ile Lys | | | |
| 100 | 105 | 110 | |
| Lys Leu Pro Arg Asn Pro Gln Arg Glu Glu Ile Ile Gly Asn Gly Glu | | | |
| 115 | 120 | 125 | |
| Gln Gln Tyr Val Tyr Leu Lys Asp Gly Asp Val Ile Lys Thr Glu Gly | | | |
| 130 | 135 | 140 | |
| Ala Thr Leu Arg Val Leu Tyr Thr Pro Gly His Thr Asp Asp His Met | | | |
| 145 | 150 | 155 | 160 |
| Ala Leu Leu Leu Glu Glu Asn Ala Ile Phe Ser Gly Asp Cys Ile | | | |
| 165 | 170 | 175 | |
| Leu Gly Glu Gly Thr Thr Val Phe Glu Asp Leu Tyr Asp Tyr Met Asn | | | |
| 180 | 185 | 190 | |
| Ser Leu Lys Glu Leu Leu Lys Ile Lys Ala Asp Ile Ile Tyr Pro Gly | | | |
| 195 | 200 | 205 | |
| His Gly Pro Val Ile His Asn Ala Glu Ala Lys Ile Gln Gln Tyr Ile | | | |
| 210 | 215 | 220 | |
| Ser His Arg Asn Ile Arg Glu Gln Gln Ile Leu Thr Leu Phe Arg Glu | | | |
| 225 | 230 | 235 | 240 |
| Asn Phe Glu Lys Ser Phe Thr Val Met Glu Leu Val Lys Ile Ile Tyr | | | |
| 245 | 250 | 255 | |
| Lys Asn Thr Pro Glu Asn Leu His Glu Met Ala Lys His Asn Leu Leu | | | |
| 260 | 265 | 270 | |
| Leu His Leu Lys Lys Leu Glu Lys Glu Gly Lys Ile Phe Ser Asn Thr | | | |
| 275 | 280 | 285 | |
| Asp Pro Asp Lys Lys Trp Lys Ala His Leu | | | |
| 290 | 295 | 298 | |

<210> 1308
 <211> 306
 <212>Amino acid
 <213> Homo sapiens

| | | | |
|---|-----|-----|-----|
| <400> 1308 | | | |
| Glu Leu His Arg Ala Gly Gln Val Ala Gly Gly Ala Arg Arg Ser Arg | | | |
| 1 | 5 | 10 | 15 |
| Arg Glu Ser Met Glu Leu Glu Arg Ile Val Ser Ala Ala Leu Leu Ala | | | |
| 20 | 25 | 30 | |
| Phe Val Gln Thr His Leu Pro Glu Ala Asp Leu Ser Gly Leu Asp Glu | | | |
| 35 | 40 | 45 | |
| Val Ile Phe Ser Tyr Val Leu Gly Val Leu Glu Asp Leu Gly Pro Ser | | | |
| 50 | 55 | 60 | |
| Gly Pro Ser Glu Glu Asn Phe Asp Met Glu Ala Phe Thr Glu Met Met | | | |
| 65 | 70 | 75 | 80 |
| Glu Ala Tyr Val Pro Gly Phe Ala His Ile Pro Arg Gly Thr Ile Gly | | | |
| 85 | 90 | 95 | |
| Asp Met Met Gln Lys Leu Ser Gly Gln Leu Ser Asp Ala Arg Asn Lys | | | |
| 100 | 105 | 110 | |
| Glu Asn Leu Gln Pro Gln Ser Ser Gly Val Gln Gly Gln Val Pro Ile | | | |
| 115 | 120 | 125 | |
| Ser Pro Glu Pro Leu Gln Arg Pro Glu Met Leu Lys Glu Glu Thr Arg | | | |
| 130 | 135 | 140 | |
| Ser Ser Ala Ala Ala Ala Asp Thr Gln Asp Glu Ala Thr Gly Ala | | | |
| 145 | 150 | 155 | 160 |
| Glu Glu Glu Leu Leu Pro Gly Val Asp Val Leu Leu Glu Val Phe Pro | | | |
| 165 | 170 | 175 | |
| Thr Cys Ser Val Glu Gln Ala Gln Trp Val Leu Ala Lys Ala Arg Gly | | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asp | Leu | Glu | Glu | Ala | Val | Gln | Met | Leu | Val | Glu | Gly | Lys | Glu | Glu | Gly |
| 180 | | | | | | 185 | | | | 190 | | | | | |
| 195 | | | | | | 200 | | | | 205 | | | | | |
| Pro | Ala | Ala | Trp | Glu | Gly | Pro | Asn | Gln | Asp | Leu | Pro | Arg | Arg | Leu | Arg |
| 210 | | | | | | 215 | | | | 220 | | | | | |
| Gly | Pro | Gln | Lys | Asp | Glu | Leu | Lys | Ser | Phe | Ile | Leu | Gln | Lys | Tyr | Met |
| 225 | | | | | | 230 | | | | 235 | | | | | 240 |
| Met | Val | Asp | Ser | Ala | Glu | Asp | Gln | Lys | Ile | His | Arg | Pro | Met | Ala | Pro |
| 245 | | | | | | 250 | | | | 255 | | | | | 255 |
| Lys | Glu | Ala | Pro | Lys | Lys | Leu | Ile | Arg | Tyr | Ile | Asp | Asn | Gln | Val | Val |
| 260 | | | | | | 265 | | | | 270 | | | | | |
| Ser | Thr | Lys | Gly | Glu | Arg | Phe | Lys | Asp | Val | Arg | Asn | Pro | Glu | Ala | Glu |
| 275 | | | | | | 280 | | | | 285 | | | | | |
| Glu | Met | Lys | Ala | Thr | Tyr | Ile | Asn | Leu | Lys | Pro | Ala | Arg | Lys | Tyr | Arg |
| 290 | | | | | | 295 | | | | 300 | | | | | |
| Phe | His | | | | | | | | | | | | | | |
| 305 | 306 | | | | | | | | | | | | | | |

<210> 1309
<211> 174
<212>Amino acid
<213> Homo sapiens

| | | | | | | | | | | | | | | | |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <400> 1309 | | | | | | | | | | | | | | | |
| Phe | Ile | Thr | Gly | Lys | Gly | Ile | Val | Ala | Ile | Leu | Arg | Cys | Leu | Gln | Phe |
| 1 | | | | | | 5 | | | | 10 | | | | | 15 |
| Asn | Glu | Thr | Leu | Thr | Glu | Leu | Arg | Phe | His | Asn | Gln | Arg | His | Met | Leu |
| 20 | | | | | | 25 | | | | | | | | | 30 |
| Gly | His | His | Ala | Glu | Met | Glu | Ile | Ala | Arg | Leu | Leu | Lys | Ala | Asn | Asn |
| 35 | | | | | | 40 | | | | | | | | | 45 |
| Thr | Leu | Leu | Lys | Met | Gly | Tyr | His | Phe | Glu | Leu | Pro | Gly | Pro | Arg | Met |
| 50 | | | | | | 55 | | | | | | | | | 60 |
| Val | Val | Thr | Asn | Leu | Leu | Thr | Arg | Asn | Gln | Asp | Lys | Gln | Arg | Gln | Lys |
| 65 | | | | | | 70 | | | | | | | | | 80 |
| Arg | Gln | Glu | Glu | Gln | Lys | Gln | Gln | Leu | Lys | Glu | Gln | Lys | Lys | Leu | |
| 85 | | | | | | 90 | | | | | | | | | 95 |
| Ile | Ala | Met | Leu | Glu | Asn | Gly | Leu | Gly | Leu | Pro | Pro | Gly | Met | Trp | Glu |
| 100 | | | | | | 105 | | | | | | | | | 110 |
| Leu | Leu | Gly | Gly | Pro | Lys | Pro | Asp | Ser | Arg | Met | Gln | Glu | Phe | Phe | Gln |
| 115 | | | | | | 120 | | | | | | | | | 125 |
| Pro | Pro | Pro | Pro | Arg | Pro | Pro | Asn | Pro | Gln | Asn | Val | Pro | Phe | Ser | Gln |
| 130 | | | | | | 135 | | | | | | | | | 140 |
| Arg | Ser | Glu | Met | Met | Lys | Lys | Pro | Ser | Gln | Ala | Pro | Lys | Tyr | Arg | Thr |
| 145 | | | | | | 150 | | | | | | | | | 160 |
| Asp | Pro | Asp | Ser | Phe | Arg | Val | Val | Lys | Leu | Lys | Arg | Ile | Gln | | |
| 165 | | | | | | 170 | | | | | | | | | 174 |

<210> 1310
<211> 616
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(616)
<223> X = any amino acid or stop code

<400> 1310
 Gly Gly Arg Ala Gly Thr Gln Cys Cys Trp Arg Ala Gly Ala Arg Leu
 1 5 10 15
 Arg Gly Ile Ser Pro Ser Pro Ala Leu Pro Glu Ala Pro Gly Leu Cys
 20 25 30
 Arg Val Arg Ala Gly Leu Gly Ala Gly Ala Leu Gly Arg Ser Pro Ala
 35 40 45
 Gly Arg Arg Arg Gly Pro Arg Val Ser Ser Ser Pro Ala Pro His
 50 55 60
 Pro Arg Arg Val Leu Cys Arg Cys Leu Leu Phe Leu Phe Ser Cys
 65 70 75 80
 His Asp Arg Arg Gly Asp Ser Gln Pro Tyr Gln Ala Leu Lys Tyr Ser
 85 90 95
 Ser Lys Ser His Pro Ser Ser Gly Asp His Arg His Glu Lys Met Arg
 100 105 110
 Asp Ala Gly Asp Pro Ser Pro Pro Asn Lys Met Leu Arg Arg Ser Asp
 115 120 125
 Ser Pro Glu Asn Lys Tyr Ser Asp Ser Thr Gly His Ser Lys Ala Lys
 130 135 140
 Asn Val His Thr His Arg Val Arg Glu Arg Asp Gly Gly Thr Ser Tyr
 145 150 155 160
 Ser Pro Gln Glu Asn Ser His Asn His Ala Leu His Ser Ser Asn
 165 170 175
 Phe Thr Phe Leu Ile Pro Ser Asn Xaa Pro Gln Gly Lys Thr Phe
 180 185 190
 Arg Ile Ala Pro Tyr Asp Ser Ala Asp Asp Trp Ser Leu Glu His Ile
 195 200 205
 Ser Ser Gly Glu Lys Tyr Tyr Asn Cys Arg Thr Glu Val Ser
 210 215 220
 Gln Trp Gly Lys Thr Pro Lys Ser Gly Leu Glu Arg Gly Gln Arg Gln
 225 230 235 240
 Lys Glu Ala Asn Lys Met Ala Val Asn Ser Phe Pro Lys Asp Arg Asp
 245 250 255
 Tyr Arg Arg Glu Val Met Gln Ala Thr Ala Thr Ser Gly Phe Ala Ser
 260 265 270
 Gly Lys Ser Thr Ser Gly Asp Lys Pro Val Ser His Ser Cys Thr Thr
 275 280 285
 Pro Ser Thr Ser Ser Ala Ser Gly Leu Asn Pro Thr Ser Ala Pro Pro
 290 295 300
 Thr Ser Ala Ser Ala Val Pro Val Ser Pro Val Pro Gln Ser Pro Ile
 305 310 315 320
 Pro Pro Leu Leu Gln Asp Pro Asn Leu Leu Arg Gln Leu Leu Pro Ala
 325 330 335
 Leu Glu Ala Thr Leu Gln Leu Asn Asn Ser Asn Val Asp Ile Ser Ile
 340 345 350
 Ile Asn Glu Val Leu Thr Gly Asp Val Thr Gln Ala Ser Leu Gln Thr
 355 360 365
 Ile Ile His Lys Cys Leu Thr Ala Gly Pro Ser Val Phe Lys Ile Thr
 370 375 380
 Ser Leu Ile Ser Gln Ala Ala Gln Leu Ser Thr Gln Ala Gln Ala Ser
 385 390 395 400
 Asn Gln Ser Pro Met Ser Leu Thr Ser Asp Ala Ser Ser Pro Arg Ser
 405 410 415
 Tyr Val Ser Pro Arg Asn Lys Ala His Leu Lys Leu Asn Thr Val Pro
 420 425 430
 Ile Gln Thr Phe Gly Phe Ser Thr Pro Pro Val Ser Ser Gln Pro Lys
 435 440 445
 Val Ser Thr Pro Val Val Lys Gln Gly Pro Val Ser Gln Ser Ala Thr
 450 455 460
 Gln Gln Pro Val Thr Ala Asp Lys Gln Gln Gly His Glu Pro Val Ser
 465 470 475 480

Pro Arg Ser Leu Gln Arg Ser Ser Ser Gln Arg Ser Pro Ser Pro Gly
 485 490 495
 Pro Asn His Thr Ser Asn Ser Ser Asn Ala Ser Asn Ala Thr Val Val
 500 505 510
 Pro Gln Asn Ser Ser Ala Arg Ser Thr Cys Ser Leu Thr Pro Ala Leu
 515 520 525
 Ala Ala His Phe Ser Glu Asn Leu Ile Lys His Val Gln Gly Trp Pro
 530 535 540
 Ala Asp His Ala Glu Lys Gln Ala Ser Arg Leu Arg Glu Ala His
 545 550 555 560
 Asn Met Gly Thr Ile His Met Ser Glu Ile Cys Thr Glu Leu Lys Asn
 565 570 575
 Leu Arg Ser Leu Val Arg Val Cys Glu Ile Gln Ala Thr Leu Arg Glu
 580 585 590
 Gln Arg Ile Leu Phe Leu Arg Gln Gln Ile Lys Glu Leu Glu Lys Leu
 595 600 605
 Lys Asn Gln Asn Ser Phe Met Val
 610 615 616

<210> 1311
 <211> 387
 <212>Amino acid
 <213> Homo sapiens

<400> 1311
 Val Ala Pro Glu Cys Arg Gly Ala Tyr Pro Phe Arg Ala Met Met Pro
 1 5 10 15
 Gly Thr Ala Leu Lys Ala Val Leu Leu Ala Val Leu Leu Val Gly Leu
 20 25 30
 Gln Thr Ala Thr Gly Arg Leu Leu Ser Gly Gln Pro Val Cys Arg Gly
 35 40 45
 Gly Thr Gln Arg Pro Cys Tyr Lys Val Ile Tyr Phe His Asp Thr Ser
 50 55 60
 Arg Arg Leu Asn Phe Glu Ala Lys Glu Ala Cys Arg Arg Asp Gly
 65 70 75 80
 Gly Gln Leu Val Ser Ile Glu Ser Glu Asp Glu Gln Lys Leu Ile Glu
 85 90 95
 Lys Phe Ile Glu Asn Leu Leu Pro Ser Asp Gly Asp Phe Trp Ile Gly
 100 105 110
 Leu Arg Arg Glu Glu Lys Gln Ser Asn Ser Thr Ala Cys Gln Asp
 115 120 125
 Leu Tyr Ala Trp Thr Asp Gly Ser Ile Ser Gln Phe Arg Asn Trp Tyr
 130 135 140
 Val Asp Glu Pro Ser Cys Gly Ser Glu Val Cys Val Val Met Tyr His
 145 150 155 160
 Gln Pro Ser Ala Pro Ala Gly Ile Gly Gly Pro Tyr Met Phe Gln Trp
 165 170 175
 Asn Asp Asp Arg Cys Asn Met Lys Asn Asn Phe Ile Cys Lys Tyr Ser
 180 185 190
 Asp Glu Lys Pro Ala Val Pro Ser Arg Glu Ala Glu Gly Glu Glu Thr
 195 200 205
 Glu Leu Thr Thr Pro Val Leu Pro Glu Glu Thr Gln Glu Glu Asp Ala
 210 215 220
 Lys Lys Thr Phe Lys Glu Ser Arg Glu Ala Ala Leu Asn Leu Ala Tyr
 225 230 235 240
 Ile Leu Ile Pro Ser Ile Pro Leu Leu Leu Leu Val Val Thr Thr
 245 250 255
 Val Val Cys Trp Val Trp Ile Cys Arg Lys Arg Lys Glu Gln Pro
 260 265 270

Asp Pro Ser Thr Lys Lys Gln His Thr Ile Trp Pro Ser Pro His Gln
 275 280 285
 Gly Asn Ser Pro Asp Leu Glu Val Tyr Asn Val Ile Arg Lys Gln Ser
 290 295 300
 Glu Ala Asp Leu Ala Glu Thr Arg Pro Asp Leu Lys Asn Ile Ser Phe
 305 310 315 320
 Arg Val Cys Ser Gly Glu Ala Thr Pro Asp Asp Met Ser Cys Asp Tyr
 325 330 335
 Asp Asn Met Ala Val Asn Pro Ser Glu Ser Gly Phe Val Thr Leu Val
 340 345 350
 Ser Val Glu Ser Gly Phe Val Thr Asn Asp Ile Tyr Glu Phe Ser Pro
 355 360 365
 Asp Glu Met Gly Arg Ser Lys Glu Ser Gly Trp Val Glu Asn Glu Ile
 370 375 380
 Tyr Gly Tyr
 385 387

<210> 1312
 <211> 470
 <212>Amino acid
 <213> Homo sapiens

<400> 1312
 Thr Glu Trp Gly Leu Ser Gly Ser Cys Pro Gly Cys Ser Pro Leu Glu
 1 5 10 15
 Pro Gly Ser Arg Gly Arg Gly Ala Ala Ala Trp Arg Ile Leu Arg Cys
 20 25 30
 Arg Arg Leu Pro Glu Pro Ser Pro Phe Leu Thr Gln Pro Asn Leu Ala
 35 40 45
 Gln Ser Gln Pro Pro Ala Pro Val Pro Val Thr Asp Pro Ser Val Thr
 50 55 60
 Met His Pro Ala Val Phe Leu Ser Leu Pro Asp Leu Arg Cys Ser Leu
 65 70 75 80
 Leu Leu Leu Val Thr Trp Val Phe Thr Pro Val Thr Thr Glu Ile Thr
 85 90 95
 Ser Leu Asp Thr Glu Asn Ile Asp Glu Ile Leu Asn Asn Ala Asp Val
 100 105 110
 Ala Leu Val Asn Phe Tyr Ala Asp Trp Cys Arg Phe Ser Gln Met Leu
 115 120 125
 His Pro Ile Phe Glu Glu Ala Ser Asp Val Ile Lys Glu Glu Phe Pro
 130 135 140
 Asn Glu Asn Gln Val Val Phe Ala Arg Val Asp Cys Asp Gln His Ser
 145 150 155 160
 Asp Ile Ala Gln Arg Tyr Arg Ile Ser Lys Tyr Pro Thr Leu Lys Leu
 165 170 175
 Phe Arg Asn Gly Met Met Met Lys Arg Glu Tyr Arg Gly Gln Arg Ser
 180 185 190
 Val Lys Ala Leu Ala Asp Tyr Ile Arg Gln Gln Lys Ser Asp Pro Ile
 195 200 205
 Gln Glu Ile Arg Asp Leu Ala Glu Ile Thr Thr Leu Asp Arg Ser Lys
 210 215 220
 Arg Asn Ile Ile Gly Tyr Phe Glu Gln Lys Asp Ser Asp Asn Tyr Arg
 225 230 235 240
 Val Phe Glu Arg Val Ala Asn Ile Leu His Asp Asp Cys Ala Phe Leu
 245 250 255
 Ser Ala Phe Gly Asp Val Ser Lys Pro Glu Arg Tyr Ser Gly Asp Asn
 260 265 270
 Ile Ile Tyr Lys Pro Pro Gly His Ser Ala Pro Asp Met Val Tyr Leu
 275 280 285

Gly Ala Met Thr Asn Phe Asp Val Thr Tyr Asn Trp Ile Gln Asp Lys
 290 295 300
 Cys Val Pro Leu Val Arg Glu Ile Thr Phe Glu Asn Gly Glu Glu Leu
 305 310 315 320
 Thr Glu Glu Gly Leu Pro Phe Leu Ile Leu Phe His Met Lys Glu Asp
 325 330 335
 Thr Glu Ser Leu Glu Ile Phe Gln Asn Glu Val Ala Arg Gln Leu Ile
 340 345 350
 Ser Glu Lys Gly Thr Ile Asn Phe Leu His Ala Asp Cys Asp Lys Phe
 355 360 365
 Arg His Pro Leu Leu His Ile Gln Lys Thr Pro Ala Asp Cys Pro Val
 370 375 380
 Ile Ala Ile Asp Ser Phe Arg His Met Tyr Val Phe Gly Asp Phe Lys
 385 390 395 400
 Asp Val Leu Ile Pro Gly Lys Leu Lys Gln Phe Val Phe Asp Leu His
 405 410 415
 Ser Gly Lys Leu His Arg Glu Phe His His Gly Pro Asp Pro Thr Asp
 420 425 430
 Thr Ala Pro Gly Glu Gln Ala Gln Asp Val Ala Ser Ser Pro Pro Glu
 435 440 445
 Ser Ser Phe Gln Lys Leu Ala Pro Ser Glu Tyr Arg Tyr Thr Leu Leu
 450 455 460
 Arg Asp Arg Asp Glu Leu
 465 470

<210> 1313
<211> 262
<212>Amino acid
<213> Homo sapiens

<400> 1313
 Leu Thr Pro Ser Val Gly Pro Val Phe Pro Gly Arg Pro Thr Arg Pro
 1 5 10 15
 Leu Ala Ser Pro Phe Pro Val Pro Leu His Arg Cys Ser Ala Gly Ser
 20 25 30
 Gln Pro Pro Gly Pro Val Pro Glu Gly Leu Ile Arg Ile Tyr Ser Met
 35 40 45
 Arg Phe Cys Pro Tyr Ser His Arg Thr Arg Leu Val Leu Lys Ala Lys
 50 55 60
 Asp Ile Arg His Glu Val Val Asn Ile Asn Leu Arg Asn Lys Pro Glu
 65 70 75 80
 Trp Tyr Tyr Thr Lys His Pro Phe Gly His Ile Pro Val Leu Glu Thr
 85 90 95
 Ser Gln Cys Gln Leu Ile Tyr Glu Ser Val Ile Ala Cys Glu Tyr Leu
 100 105 110
 Asp Asp Ala Tyr Pro Gly Arg Lys Leu Phe Pro Tyr Asp Pro Tyr Glu
 115 120 125
 Arg Ala Arg Gln Lys Met Leu Leu Glu Leu Phe Cys Lys Val Pro His
 130 135 140
 Leu Thr Lys Glu Cys Leu Val Ala Leu Arg Cys Gly Arg Glu Cys Thr
 145 150 155 160
 Asn Leu Lys Ala Ala Leu Arg Gln Glu Phe Ser Asn Leu Glu Glu Ile
 165 170 175
 Leu Glu Tyr Gln Asn Thr Thr Phe Phe Gly Gly Thr Cys Ile Ser Met
 180 185 190
 Ile Asp Tyr Leu Leu Trp Pro Trp Phe Glu Arg Leu Asp Val Tyr Gly
 195 200 205
 Ile Leu Asp Cys Val Ser His Thr Pro Ala Leu Arg Leu Trp Ile Ser
 210 215 220

| | |
|---|-------------------------|
| Ala Met Lys Trp Asp Pro Thr Val Cys Ala | Leu Leu Met Asp Lys Ser |
| 225 230 235 240 | |
| Ile Phe Gln Gly Phe Leu Asn Leu Tyr Phe Gln Asn Asn Pro Asn Ala | |
| 245 250 255 | |
| Phe Asp Phe Gly Leu Cys | |
| 260 262 | |

<210> 1314
<211> 173
<212>Amino acid
<213> Homo sapiens

| | | |
|---|--|--|
| <400> 1314 | | |
| Asn Thr Ala Thr Asn Met Thr Gln Pro Asn Ala Gly Thr Arg Lys Tyr | | |
| 1 5 10 15 | | |
| Ser Val Pro Ala Ile Ser Val His Thr Ser Ser Ser Phe Ala Tyr | | |
| 20 25 30 | | |
| Asp Arg Glu Phe Leu Arg Thr Leu Pro Gly Phe Leu Ile Val Ala Glu | | |
| 35 40 45 | | |
| Ile Val Leu Gly Leu Leu Val Trp Thr Leu Ile Ala Gly Thr Glu Tyr | | |
| 50 55 60 | | |
| Phe Arg Val Pro Ala Phe Gly Trp Val Met Phe Val Ala Val Phe Tyr | | |
| 65 70 75 80 | | |
| Trp Val Leu Thr Val Phe Phe Leu Ile Ile Tyr Ile Thr Met Thr Tyr | | |
| 85 90 95 | | |
| Thr Arg Ile Pro Gln Val Pro Trp Thr Val Gly Leu Cys Phe Asn | | |
| 100 105 110 | | |
| Gly Ser Ala Phe Val Leu Tyr Leu Ser Ala Ala Val Val Asp Ala Ser | | |
| 115 120 125 | | |
| Ser Val Ser Pro Glu Arg Asp Ser His Asn Phe Asn Ser Trp Ala Ala | | |
| 130 135 140 | | |
| Ser Ser Phe Phe Ala Phe Leu Val Thr Ile Cys Tyr Ala Gly Asn Thr | | |
| 145 150 155 160 | | |
| Tyr Phe Ser Phe Ile Ala Trp Arg Ser Arg Thr Ile Gln | | |
| 165 170 173 | | |

<210> 1315
<211> 259
<212>Amino acid
<213> Homo sapiens

| | | |
|---|--|--|
| <400> 1315 | | |
| Gly Leu Arg Asp Pro Phe Arg Arg Lys Arg Arg Leu Lys Pro Gln Val | | |
| 1 5 10 15 | | |
| Lys Met Ser Asn Tyr Val Asn Asp Met Trp Pro Gly Ser Pro Gln Glu | | |
| 20 25 30 | | |
| Lys Asp Ser Pro Ser Thr Ser Arg Ser Gly Gly Ser Ser Arg Leu Ser | | |
| 35 40 45 | | |
| Ser Arg Ser Arg Ser Arg Ser Phe Ser Arg Ser Ser Arg Ser His Ser | | |
| 50 55 60 | | |
| Arg Val Ser Ser Arg Phe Ser Ser Arg Ser Arg Arg Ser Lys Ser Arg | | |
| 65 70 75 80 | | |
| Ser Arg Ser Arg Arg His Gln Arg Lys Tyr Arg Arg Tyr Ser Arg | | |
| 85 90 95 | | |

Ser Tyr Ser Arg Ser Arg Ser Arg Ser Arg Ser Arg Arg Tyr Arg Glu
 100 105 110
 Arg Arg Tyr Gly Phe Thr Arg Arg Tyr Tyr Arg Ser Pro Ser Arg Tyr
 115 120 125
 Arg Ser Arg Ser Arg Ser Arg Ser Arg Gly Arg Ser Tyr Cys
 130 135 140
 Gly Arg Ala Tyr Ala Ile Ala Arg Gly Gln Arg Tyr Tyr Gly Phe Gly
 145 150 155 160
 Arg Thr Val Tyr Pro Glu Glu His Ser Arg Trp Arg Asp Arg Ser Arg
 165 170 175
 Thr Arg Ser Arg Ser Arg Thr Pro Phe Arg Leu Ser Glu Lys Asp Arg
 180 185 190
 Met Glu Leu Leu Glu Ile Ala Lys Thr Asn Ala Ala Lys Ala Leu Gly
 195 200 205
 Thr Thr Asn Ile Asp Leu Pro Ala Ser Leu Arg Thr Val Pro Ser Ala
 210 215 220
 Lys Glu Thr Ser Arg Gly Ile Gly Val Ser Ser Asn Gly Ala Lys Pro
 225 230 235 240
 Glu Val Ser Ile Ile Gly Leu Ser Glu Gln Asn Phe Gln Lys Ala Asn
 245 250 255
 Cys Gln Ile
 259

<210> 1316
 <211> 678
 <212>Amino acid
 <213> Homo sapiens

<400> 1316
 Ala Glu Gly Ser Thr Met Asp Leu Thr Lys Met Gly Met Ile Gln Leu
 1 5 10 15
 Gln Asn Pro Asn His Pro Thr Gly Leu Leu Cys Lys Ala Asn Gln Met
 20 25 30
 Arg Ile Ala Gly Thr Leu Cys Asp Val Val Ile Met Val Asp Ser Gln
 35 40 45
 Glu Phe His Ala His Arg Thr Val Leu Ala Cys Thr Ser Lys Met Phe
 50 55 60
 Glu Ile Leu Phe His Arg Asn Ser Gln His Tyr Thr Leu Asp Phe Leu
 65 70 75 80
 Ser Pro Lys Thr Phe Gln Gln Ile Leu Glu Tyr Ala Tyr Thr Ala Thr
 85 90 95
 Leu Gln Ala Lys Ala Glu Asp Leu Asp Asp Leu Leu Tyr Ala Ala Glu
 100 105 110
 Ile Leu Glu Ile Glu Tyr Leu Glu Glu Gln Cys Leu Lys Met Leu Glu
 115 120 125
 Thr Ile Gln Ala Ser Asp Asp Asn Asp Thr Glu Ala Thr Met Ala Asp
 130 135 140
 Gly Gly Ala Glu Glu Lys Lys Asp Arg Lys Ala Arg Tyr Leu Lys Asn
 145 150 155 160
 Ile Phe Ile Ser Lys His Ser Ser Glu Glu Ser Gly Tyr Ala Ser Val
 165 170 175
 Ala Gly Gln Ser Leu Pro Gly Pro Met Val Asp Gln Ser Pro Ser Val
 180 185 190
 Ser Thr Ser Phe Gly Leu Ser Ala Met Ser Pro Thr Lys Ala Ala Val
 195 200 205
 Asp Ser Leu Met Thr Ile Gly Gln Ser Leu Leu Gln Gly Thr Leu Gln
 210 215 220
 Pro Pro Ala Gly Pro Glu Glu Pro Thr Leu Ala Gly Gly Gly Arg His
 225 230 235 240

Pro Gly Val Ala Glu Val Lys Thr Glu Met Met Gln Val Asp Glu Val
 245 250 255
 Pro Ser Gln Asp Ser Pro Gly Ala Ala Glu Ser Ser Ile Ser Gly Gly
 260 265 270
 Met Gly Asp Lys Val Glu Glu Arg Gly Lys Glu Gly Pro Gly Thr Pro
 275 280 285
 Thr Arg Ser Ser Val Ile Thr Ser Ala Arg Glu Leu His Tyr Gly Arg
 290 295 300
 Glu Glu Ser Ala Glu Gln Val Pro Pro Pro Ala Glu Ala Gly Gln Ala
 305 310 315 320
 Pro Thr Gly Arg Pro Glu His Pro Ala Pro Pro Pro Glu Lys His Leu
 325 330 335
 Gly Ile Tyr Ser Val Leu Pro Asn His Lys Ala Asp Ala Val Leu Ser
 340 345 350
 Met Pro Ser Ser Val Thr Ser Gly Leu His Val Gln Pro Ala Leu Ala
 355 360 365
 Val Ser Met Asp Phe Ser Thr Tyr Gly Gly Leu Leu Pro Gln Gly Phe
 370 375 380
 Ile Gln Arg Glu Leu Phe Ser Lys Leu Gly Glu Leu Ala Val Gly Met
 385 390 395 400
 Lys Ser Glu Ser Arg Thr Ile Gly Glu Gln Cys Ser Val Cys Gly Val
 405 410 415
 Glu Leu Pro Asp Asn Glu Ala Val Glu Gln His Arg Lys Leu His Ser
 420 425 430
 Gly Met Lys Thr Tyr Gly Cys Glu Leu Cys Gly Lys Arg Phe Leu Asp
 435 440 445
 Ser Leu Arg Leu Arg Met His Leu Leu Ala His Ser Ala Gly Ala Lys
 450 455 460
 Ala Phe Val Cys Asp Gln Cys Gly Ala Gln Phe Ser Lys Glu Asp Ala
 465 470 475 480
 Leu Glu Thr His Arg Gln Thr His Thr Gly Thr Asp Met Ala Val Phe
 485 490 495
 Cys Leu Leu Cys Gly Lys Arg Phe Gln Ala Gln Ser Ala Leu Gln Gln
 500 505 510
 His Met Glu Val His Ala Gly Val Arg Ser Tyr Ile Cys Ser Glu Cys
 515 520 525
 Asn Arg Thr Phe Pro Ser His Thr Ala Leu Lys Arg His Leu Arg Ser
 530 535 540
 His Thr Gly Asp His Pro Tyr Glu Cys Glu Phe Cys Gly Ser Cys Phe
 545 550 555 560
 Arg Asp Glu Ser Thr Leu Lys Ser His Lys Arg Ile His Thr Gly Glu
 565 570 575
 Lys Pro Tyr Glu Cys Asn Gly Cys Gly Lys Lys Phe Ser Leu Lys His
 580 585 590
 Gln Leu Glu Thr His Tyr Arg Val His Thr Gly Glu Lys Pro Phe Glu
 595 600 605
 Cys Lys Leu Cys His Gln Arg Ser Arg Asp Tyr Ser Ala Met Ile Lys
 610 615 620
 His Leu Arg Thr His Asn Gly Ala Ser Pro Tyr Gln Cys Thr Ile Cys
 625 630 635 640
 Thr Glu Tyr Cys Pro Ser Leu Ser Ser Met Gln Lys His Met Lys Gly
 645 650 655
 His Lys Pro Glu Glu Ile Pro Pro Asp Trp Arg Ile Glu Lys Thr Tyr
 660 665 670
 Leu Tyr Leu Cys Tyr Val
 675 678

<210> 1317
 <211> 74
 <212>Amino acid
 <213> Homo sapiens

<400> 1317
 Ile Trp Glu Ala Pro Thr Leu Ile Phe Thr Leu Ala Gly Gly Arg Ala
 1 5 10 15
 Leu Gly His Pro Pro Met Gln Lys Gly Ser Gln Gly Cys Ala Leu Pro
 20 25 30
 His Pro Leu Pro Gly Ala Ser Leu Pro Ala Gln Pro Gly Pro Ala Asp
 35 40 45
 His Arg Gly Trp Glu Cys Arg Ile Gly Gly Glu Ala Ser Val Phe Thr
 50 55 60
 His Leu Phe Cys Leu Pro His Ser Pro Thr
 65 70 74

<210> 1318
 <211> 351
 <212>Amino acid
 <213> Homo sapiens

<400> 1318
 Ala Ser Gly Ser Pro Ala Pro Ser Ser Ser Ala Met Ala Ala Ala
 1 5 10 15
 Cys Gly Pro Gly Ala Ala Gly Tyr Cys Leu Leu Leu Gly Leu His Leu
 20 25 30
 Phe Leu Leu Thr Ala Gly Pro Ala Leu Gly Trp Asn Asp Pro Asp Arg
 35 40 45
 Met Leu Leu Arg Asp Val Lys Ala Leu Thr Leu His Tyr Asp Arg Tyr
 50 55 60
 Thr Thr Ser Arg Arg Leu Asp Pro Ile Pro Gln Leu Lys Cys Val Gly
 65 70 75 80
 Gly Thr Ala Gly Cys Asp Ser Tyr Thr Pro Lys Val Ile Gln Cys Gln
 85 90 95
 Asn Lys Gly Trp Asp Gly Tyr Asp Val Gln Trp Glu Cys Lys Thr Asp
 100 105 110
 Leu Asp Ile Ala Tyr Lys Phe Gly Lys Thr Val Val Ser Cys Glu Gly
 115 120 125
 Tyr Glu Ser Ser Glu Asp Gln Tyr Val Leu Arg Gly Ser Cys Gly Leu
 130 135 140
 Glu Tyr Asn Leu Asp Tyr Thr Glu Leu Gly Leu Gln Lys Leu Lys Glu
 145 150 155 160
 Ser Gly Lys Gln His Gly Phe Ala Ser Phe Ser Asp Tyr Tyr Lys
 165 170 175
 Trp Ser Ser Ala Asp Ser Cys Asn Met Ser Gly Leu Ile Thr Ile Val
 180 185 190
 Val Leu Leu Gly Ile Ala Phe Val Val Tyr Lys Leu Phe Leu Ser Asp
 195 200 205
 Gly Gln Tyr Ser Pro Pro Pro Tyr Ser Gln Tyr Pro Pro Phe Ser His
 210 215 220
 Arg Tyr Gln Arg Phe Thr Asn Ser Ala Gly Pro Pro Pro Pro Gly Phe
 225 230 235 240
 Lys Ser Glu Phe Thr Gly Pro Gln Asn Thr Gly His Gly Ala Thr Ser
 245 250 255
 Gly Phe Gly Ser Ala Phe Thr Gly Gln Gln Gly Tyr Glu Asn Ser Gly
 260 265 270
 Pro Gly Phe Trp Thr Gly Leu Gly Thr Gly Gly Ile Leu Gly Tyr Leu
 275 280 285
 Phe Gly Ser Asn Arg Ala Ala Thr Pro Phe Ser Asp Ser Trp Tyr Tyr
 290 295 300

| | | | |
|---|-----|-----|-----|
| Pro Ser Tyr Pro Pro Ser Tyr Pro Gly Thr Trp Asn Arg Ala Tyr Ser | | | |
| 305 | 310 | 315 | 320 |
| Pro Leu His Gly Gly Ser Gly Ser Tyr Ser Val Cys Ser Asn Ser Asp | | | |
| 325 | 330 | 335 | |
| Thr Lys Thr Arg Thr Ala Ser Gly Tyr Gly Gly Thr Arg Arg Arg | | | |
| 340 | 345 | 350 | 351 |

<210> 1319
<211> 310
<212>Amino acid
<213> Homo sapiens

| | | | |
|---|-----|-----|-----|
| <400> 1319 | | | |
| Gly Arg Cys Gly Ala Met Ala Ala Gly Leu Ala Arg Leu Leu Leu | | | |
| 1 | 5 | 10 | 15 |
| Leu Gly Leu Ser Ala Gly Gly Pro Ala Pro Ala Gly Ala Ala Lys Met | | | |
| 20 | 25 | 30 | |
| Lys Val Val Glu Pro Asn Ala Phe Gly Val Asn Asn Pro Phe Leu | | | |
| 35 | 40 | 45 | |
| Pro Gln Ala Ser Arg Leu Gln Ala Lys Arg Asp Pro Ser Pro Val Ser | | | |
| 50 | 55 | 60 | |
| Gly Pro Val His Leu Phe Arg Leu Ser Gly Lys Cys Phe Ser Leu Val | | | |
| 65 | 70 | 75 | 80 |
| Glu Ser Thr Tyr Lys Tyr Glu Phe Cys Pro Phe His Asn Val Thr Gln | | | |
| 85 | 90 | 95 | |
| His Glu Gln Thr Phe Arg Trp Asn Ala Tyr Ser Gly Ile Leu Gly Ile | | | |
| 100 | 105 | 110 | |
| Trp His Glu Trp Glu Ile Ala Asn Asn Thr Phe Thr Gly Met Trp Met | | | |
| 115 | 120 | 125 | |
| Arg Asp Gly Asp Ala Cys Arg Ser Arg Ser Arg Gln Ser Lys Val Glu | | | |
| 130 | 135 | 140 | |
| Leu Ala Cys Gly Lys Ser Asn Arg Leu Ala His Val Ser Glu Pro Ser | | | |
| 145 | 150 | 155 | 160 |
| Thr Cys Val Tyr Ala Leu Thr Phe Glu Thr Pro Leu Val Cys His Pro | | | |
| 165 | 170 | 175 | |
| His Ala Leu Leu Val Tyr Pro Thr Leu Pro Glu Ala Leu Gln Arg Gln | | | |
| 180 | 185 | 190 | |
| Trp Asp Gln Val Glu Gln Asp Leu Ala Asp Glu Leu Ile Thr Pro Gln | | | |
| 195 | 200 | 205 | |
| Gly His Glu Lys Leu Leu Arg Thr Leu Phe Glu Asp Ala Gly Tyr Leu | | | |
| 210 | 215 | 220 | |
| Lys Thr Pro Glu Glu Asn Glu Pro Thr Gln Leu Glu Gly Gly Pro Asp | | | |
| 225 | 230 | 235 | 240 |
| Ser Leu Gly Phe Glu Thr Leu Glu Asn Cys Arg Lys Ala His Lys Glu | | | |
| 245 | 250 | 255 | |
| Leu Ser Lys Glu Ile Lys Arg Leu Lys Gly Leu Leu Thr Gln His Gly | | | |
| 260 | 265 | 270 | |
| Ile Pro Tyr Thr Arg Pro Thr Glu Thr Ser Asn Leu Glu His Leu Gly | | | |
| 275 | 280 | 285 | |
| His Glu Thr Pro Arg Ala Lys Ser Pro Glu Gln Leu Arg Gly Asp Pro | | | |
| 290 | 295 | 300 | |
| Gly Leu Arg Gly Ser Leu | | | |
| 305 | 310 | | |

<210> 1320
<211> 313
<212>Amino acid
<213> Homo sapiens

<400> 1320
Asn Ser Phe Trp Ser Val Leu Phe Leu Val Gln Glu Glu Thr Glu Val
1 5 10 15
Ala Arg Cys Asn Ala Gln His Arg Leu Arg Gln Ser Arg Asp Ser Lys
20 25 30
Pro Asp Pro Ser Phe Arg Ser Gln Pro Ile Asp Ser Ser Ile Ser Phe
35 40 45
Ala Gly Ser Asp Ile Gln Pro Leu Phe Ser Ala Ser Val Asp Gly
50 55 60
Thr Gln Val Gly Glu Ala Glu Glu Trp Ala Gly Pro Trp Ala Glu Ala
65 70 75 80
Thr Leu Leu Pro Gly Pro Gly Asn Arg Trp Pro Pro Arg Ala Gly Leu
85 90 95
Ser Gly Asn Trp Leu Glu Asp Gly Asp Trp Pro Ser Leu Pro Glu
100 105 110
Val Val Gly Phe Val Ser Glu Arg Glu Leu Phe Arg Asp Ala Leu Gly
115 120 125
Ala Gly Cys Arg Ile Leu Leu Ile Cys Glu Met Gln Leu Thr His Gln
130 135 140
Leu Asp Leu Phe Pro Glu Cys Arg Val Thr Leu Leu Leu Phe Lys Asp
145 150 155 160
Val Lys Asn Ala Gly Asp Leu Arg Arg Lys Ala Met Glu Gly Thr Ile
165 170 175
Asp Gly Ser Leu Ile Asn Pro Thr Val Ile Val Asp Pro Phe Gln Ile
180 185 190
Leu Val Ala Ala Asn Lys Ala Val His Leu Tyr Lys Leu Gly Lys Met
195 200 205
Lys Thr Arg Thr Leu Ser Thr Glu Ile Ile Phe Asn Leu Ser Pro Asn
210 215 220
Asn Asn Ile Ser Glu Ala Leu Lys Lys Phe Gly Ile Ser Ala Asn Asp
225 230 235 240
Thr Ser Ile Leu Ile Val Tyr Ile Glu Glu Gly Glu Lys Gln Ile Asn
245 250 255
Gln Glu Tyr Leu Ile Ser Gln Val Glu Gly His Gln Val Ser Leu Lys
260 265 270
Asn Leu Pro Glu Ile Met Asn Ile Thr Glu Val Lys Lys Ile Tyr Lys
275 280 285
Leu Ser Ser Gln Glu Glu Ser Ile Gly Thr Leu Leu Asp Ala Ile Ile
290 295 300
Cys Arg Met Ser Thr Lys Asp Val Leu
305 310 313

<210> 1321
<211> 891
<212>Amino acid
<213> Homo sapiens

<400> 1321
Gln Arg Ser Trp Ala Gly Pro Gly Ala Gly Pro Glu Ala Gly Thr Arg
1 5 10 15
Pro Pro Ala Arg Gly Arg Arg Arg Gln Pro Gly Asn Val Asp Pro Arg
20 25 30
Arg Arg Ala Pro Gln Leu Arg Ser Gln Met Gln Val Ala Met Ala Arg
35 40 45

Ala Thr Thr Ala Thr Gly Asn Arg Leu Trp Pro Gly Leu Leu Ile Met
 50 55 60
 Leu Gly Ser Leu Cys His Arg Gly Ser Pro Cys Gly Leu Ser Thr His
 65 70 75 80
 Ile Glu Ile Gly His Arg Ala Leu Glu Phe Leu Gln Leu His Asn Gly
 85 90 95
 Arg Val Asn Tyr Arg Glu Leu Leu Glu His Gln Asp Ala Tyr Gln
 100 105 110
 Ala Gly Ile Val Phe Pro Asp Cys Phe Tyr Pro Ser Ile Cys Lys Gly
 115 120 125
 Gly Lys Phe His Asp Val Ser Glu Ser Thr His Trp Thr Pro Phe Leu
 130 135 140
 Asn Ala Ser Val His Tyr Ile Arg Glu Asn Tyr Pro Leu Pro Trp Glu
 145 150 155 160
 Lys Asp Thr Glu Lys Leu Val Ala Phe Leu Phe Gly Ile Thr Ser His
 165 170 175
 Met Ala Ala Asp Val Ser Trp His Ser Leu Gly Leu Glu Gln Gly Phe
 180 185 190
 Leu Arg Thr Met Gly Ala Ile Asp Phe His Gly Ser Tyr Ser Glu Ala
 195 200 205
 His Ser Ala Gly Asp Phe Gly Gly Asp Val Leu Ser Gln Phe Glu Phe
 210 215 220
 Asn Phe Asn Tyr Leu Ala Arg Arg Trp Tyr Val Pro Val Lys Asp Leu
 225 230 235 240
 Leu Gly Ile Tyr Glu Lys Leu Tyr Gly Arg Lys Val Ile Thr Glu Asn
 245 250 255
 Val Ile Val Asp Cys Ser His Ile Gln Phe Leu Glu Met Tyr Gly Glu
 260 265 270
 Met Leu Ala Val Ser Lys Leu Tyr Pro Thr Tyr Ser Thr Lys Ser Pro
 275 280 285
 Phe Leu Val Glu Gln Phe Gln Glu Tyr Phe Leu Gly Gly Leu Asp Asp
 290 295 300
 Met Ala Phe Trp Ser Thr Asn Ile Tyr His Leu Thr Ile Phe Met Leu
 305 310 315 320
 Glu Asn Gly Thr Ser Asp Cys Asn Leu Pro Glu Asn Pro Leu Phe Ile
 325 330 335
 Ala Cys Gly Gly Gln Gln Asn His Thr Gln Gly Ser Lys Met Gln Lys
 340 345 350
 Asn Asp Phe His Arg Asn Leu Thr Thr Ser Leu Thr Glu Ser Val Asp
 355 360 365
 Arg Asn Ile Asn Tyr Thr Glu Arg Gly Val Phe Phe Ser Val Asn Ser
 370 375 380
 Trp Thr Pro Asp Ser Met Ser Phe Ile Tyr Lys Ala Leu Glu Arg Asn
 385 390 395 400
 Ile Arg Thr Met Phe Ile Gly Gly Ser Gln Leu Ser Gln Lys His Val
 405 410 415
 Ser Ser Pro Leu Ala Ser Tyr Phe Leu Ser Phe Pro Tyr Ala Arg Leu
 420 425 430
 Gly Trp Ala Met Thr Ser Ala Asp Leu Asn Gln Asp Gly His Gly Asp
 435 440 445
 Leu Val Val Gly Ala Pro Gly Tyr Ser Arg Pro Gly His Ile His Ile
 450 455 460
 Gly Arg Val Tyr Leu Ile Tyr Gly Asn Asp Leu Gly Leu Pro Pro Val
 465 470 475 480
 Asp Leu Asp Leu Asp Lys Glu Ala His Arg Ile Leu Glu Gly Phe Gln
 485 490 495
 Pro Ser Gly Arg Phe Gly Ser Ala Leu Ala Val Leu Asp Phe Asn Val
 500 505 510
 Asp Gly Val Pro Asp Leu Ala Val Gly Ala Pro Ser Val Gly Ser Glu
 515 520 525
 Gln Leu Thr Tyr Lys Gly Ala Val Tyr Val Tyr Phe Gly Ser Lys Gln
 530 535 540
 Gly Gly Met Ser Ser Pro Asn Ile Thr Ile Ser Cys Gln Asp Ile
 545 550 555 560

Tyr Cys Asn Leu Gly Trp Thr Leu Leu Ala Ala Asp Val Asn Gly Asp
 565 570 575
 Ser Glu Pro Asp Leu Val Ile Gly Ser Pro Phe Ala Pro Gly Gly Gly
 580 585 590
 Lys Gln Lys Gly Ile Val Ala Ala Phe Tyr Ser Gly Pro Ser Leu Ser
 595 600 605
 Asp Lys Glu Lys Leu Asn Val Glu Ala Ala Asn Trp Thr Val Arg Gly
 610 615 620
 Glu Glu Asp Phe Ser Trp Phe Gly Tyr Ser Leu His Gly Val Thr Val
 625 630 635 640
 Asp Asn Arg Thr Leu Leu Leu Val Gly Ser Pro Thr Trp Lys Asn Ala
 645 650 655
 Ser Arg Leu Gly His Leu Leu His Ile Arg Asp Glu Lys Lys Ser Leu
 660 665 670
 Gly Arg Val Tyr Gly Tyr Phe Pro Pro Asn Gly Gln Ser Trp Phe Thr
 675 680 685
 Ile Ser Gly Asp Lys Ala Met Gly Lys Leu Gly Thr Ser Leu Ser Ser
 690 695 700
 Gly His Val Leu Met Asn Gly Thr Leu Lys Gln Val Leu Leu Val Gly
 705 710 715 720
 Ala Pro Thr Tyr Asp Asp Val Ser Lys Val Ala Phe Leu Thr Val Thr
 725 730 735
 Leu His Gln Gly Gly Ala Thr Arg Met Tyr Ala Leu Thr Ser Asp Ala
 740 745 750
 Gln Pro Leu Leu Leu Ser Thr Phe Ser Gly Asp Arg Arg Phe Ser Arg
 755 760 765
 Phe Gly Gly Val Leu His Leu Ser Asp Leu Asp Asp Asp Gly Leu Asp
 770 775 780
 Glu Ile Ile Met Ala Ala Pro Leu Arg Ile Ala Asp Val Thr Ser Gly
 785 790 795 800
 Leu Ile Gly Gly Glu Asp Gly Arg Val Tyr Val Tyr Asn Gly Lys Glu
 805 810 815
 Thr Thr Leu Gly Asp Met Thr Gly Lys Cys Lys Ser Trp Ile Thr Pro
 820 825 830
 Cys Pro Glu Glu Lys Ala Gln Tyr Val Leu Ile Ser Pro Glu Ala Ser
 835 840 845
 Ser Arg Phe Gly Ser Ser Leu Ile Thr Val Arg Ser Lys Ala Lys Asn
 850 855 860
 Gln Val Val Ile Ala Ala Gly Arg Ser Ser Leu Gly Ala Arg Leu Ser
 865 870 875 880
 Gly Ala Leu His Val Tyr Ser Leu Gly Ser Asp
 885 890 891

<210> 1322

<211> 119

<212>Amino acid

<213> Homo sapiens

<400> 1322

Ser Leu Arg Asn Ser Ala Arg Gly Leu Lys Met Ala Ala Ser Ala Ala
 1 5 10 15
 Arg Gly Ala Ala Ala Leu Arg Arg Ser Ile Asn Gln Pro Val Ala Phe
 20 25 30
 Val Arg Arg Ile Pro Trp Thr Ala Ala Ser Ser Gln Leu Lys Glu His
 35 40 45
 Phe Ala Gln Phe Gly His Val Arg Arg Cys Ile Leu Pro Phe Asp Lys
 50 55 60
 Glu Thr Gly Phe His Arg Gly Leu Gly Trp Val Gln Phe Ser Ser Glu
 65 70 75 80

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Glu | Gly | Leu | Arg | Asn | Ala | Leu | Gln | Gln | Glu | Asn | His | Ile | Ile | Asp | Gly |
| | | | | | | | 85 | | 90 | | | | 95 | | |
| Val | Lys | Val | Val | His | Thr | Arg | Arg | Pro | Lys | Leu | Pro | Gln | Thr | Ser | |
| | | | | | | | 100 | | 105 | | | | 110 | | |
| Asp | Asp | Glu | Lys | Lys | Asp | Phe | | | | | | | | | |
| | | | | | | | 115 | | 119 | | | | | | |

<210> 1323
<211> 257
<212>Amino acid
<213> Homo sapiens

| | | | | | | | | | | | | | | | |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <400> 1323 | | | | | | | | | | | | | | | |
| Gly | Ser | Ser | Asn | Ile | His | Ser | Ala | Ser | Thr | His | Gly | Phe | Cys | His | Trp |
| 1 | | | | | | | | | | | | | | | 15 |
| Phe | Ser | Ser | Pro | Ser | Thr | Leu | Lys | Arg | Gln | Gln | Ala | Ile | Arg | Phe | |
| | | | | | | | | | | | | | | | 20 |
| Gln | Lys | Ile | Arg | Arg | Gln | Met | Glu | Ala | Pro | Gly | Ala | Pro | Pro | Arg | Thr |
| | | | | | | | | | | | | | | | 35 |
| Leu | Thr | Trp | Glu | Ala | Met | Glu | Gln | Ile | Arg | Tyr | Leu | His | Glu | Glu | Phe |
| | | | | | | | | | | | | | | | 50 |
| Pro | Glu | Ser | Trp | Ser | Val | Pro | Arg | Leu | Ala | Glu | Gly | Phe | Asp | Val | Ser |
| | | | | | | | | | | | | | | | 65 |
| Thr | Asp | Val | Ile | Arg | Arg | Val | Leu | Lys | Ser | Lys | Phe | Leu | Pro | Thr | Leu |
| | | | | | | | | | | | | | | | 85 |
| Glu | Gln | Lys | Leu | Lys | Gln | Asp | Gln | Lys | Val | Leu | Lys | Lys | Ala | Gly | Leu |
| | | | | | | | | | | | | | | | 100 |
| Ala | His | Ser | Leu | Gln | His | Leu | Arg | Gly | Ser | Gly | Asn | Thr | Ser | Lys | Leu |
| | | | | | | | | | | | | | | | 115 |
| Leu | Pro | Ala | Gly | His | Ser | Val | Ser | Gly | Ser | Leu | Leu | Met | Pro | Gly | His |
| | | | | | | | | | | | | | | | 130 |
| Glu | Ala | Ser | Ser | Lys | Asp | Pro | Asn | His | Ser | Thr | Ala | Leu | Lys | Val | Ile |
| | | | | | | | | | | | | | | | 145 |
| Glu | Ser | Asp | Thr | His | Arg | Thr | Asn | Thr | Pro | Arg | Arg | Arg | Lys | Gly | Arg |
| | | | | | | | | | | | | | | | 165 |
| Asn | Lys | Glu | Ile | Gln | Asp | Leu | Glu | Glu | Ser | Phe | Val | Pro | Val | Ala | Ala |
| | | | | | | | | | | | | | | | 180 |
| Pro | Leu | Gly | His | Pro | Arg | Glu | Leu | Gln | Lys | Tyr | Ser | Ser | Asp | Ser | Glu |
| | | | | | | | | | | | | | | | 195 |
| Ser | Pro | Arg | Gly | Thr | Gly | Ser | Gly | Ala | Leu | Pro | Ser | Gly | Gln | Lys | Leu |
| | | | | | | | | | | | | | | | 210 |
| Glu | Glu | Leu | Lys | Ala | Glu | Glu | Pro | Asp | Asn | Phe | Ser | Ser | Lys | Val | Val |
| | | | | | | | | | | | | | | | 225 |
| Gln | Arg | Gly | Arg | Glu | Phe | Phe | Asp | Ser | Asn | Gly | Asn | Phe | Leu | Tyr | Arg |
| | | | | | | | | | | | | | | | 245 |
| Ile | | | | | | | | | | | | | | | 257 |
| | | | | | | | | | | | | | | | |

<210> 1324
<211> 273
<212>Amino acid
<213> Homo sapiens

<400> 1324

Glu Thr Arg Val Lys Thr Ser Leu Glu Leu Leu Arg Thr Gln Leu Glu
 1 5 10 15
 Pro Thr Gly Thr Val Gly Asn Thr Ile Met Thr Ser Gln Pro Val Pro
 20 25 30
 Asn Glu Thr Ile Ile Val Leu Pro Ser Asn Val Ile Asn Phe Ser Gln
 35 40 45
 Ala Glu Lys Pro Glu Pro Thr Asn Gln Gly Gln Asp Ser Leu Lys Lys
 50 55 60
 His Leu His Ala Glu Ile Lys Val Ile Gly Thr Ile Gln Ile Leu Cys
 65 70 75 80
 Gly Met Met Val Leu Ser Leu Gly Ile Ile Leu Ala Ser Ala Ser Phe
 85 90 95
 Ser Pro Asn Phe Thr Gln Val Thr Ser Thr Leu Leu Asn Ser Ala Tyr
 100 105 110
 Pro Phe Ile Gly Pro Phe Phe Phe Ile Ile Ser Gly Ser Leu Ser Ile
 115 120 125
 Ala Thr Glu Lys Arg Leu Thr Lys Leu Leu Val His Ser Ser Leu Val
 130 135 140
 Gly Ser Ile Leu Ser Ala Leu Ser Ala Leu Val Gly Phe Ile Ile Leu
 145 150 155 160
 Ser Val Lys Gln Ala Thr Leu Asn Pro Ala Ser Leu Gln Cys Glu Leu
 165 170 175
 Asp Lys Asn Asn Ile Pro Thr Arg Ser Tyr Val Ser Tyr Phe Tyr His
 180 185 190
 Asp Ser Leu Tyr Thr Thr Asp Cys Tyr Thr Ala Lys Ala Ser Leu Ala
 195 200 205
 Gly Thr Leu Ser Leu Met Leu Ile Cys Thr Leu Leu Glu Phe Cys Leu
 210 215 220
 Ala Val Leu Thr Ala Val Leu Arg Trp Lys Gln Ala Tyr Ser Asp Phe
 225 230 235 240
 Pro Gly Ser Val Leu Phe Leu Pro His Ser Tyr Ile Gly Asn Ser Gly
 245 250 255
 Met Ser Ser Lys Met Thr His Asp Cys Gly Tyr Glu Glu Leu Leu Thr
 260 265 270
 Ser
 273

<210> 1325
 <211> 477
 <212> Amino acid
 <213> Homo sapiens

<400> 1325
 Glu Met Val Gly Ala Met Trp Lys Val Ile Val Ser Leu Val Leu Leu
 1 5 10 15
 Met Pro Gly Pro Cys Asp Gly Leu Phe Arg Ser Leu Tyr Arg Ser Val
 20 25 30
 Ser Met Pro Pro Lys Gly Asp Ser Gly Gln Pro Leu Phe Leu Thr Pro
 35 40 45
 Tyr Ile Glu Ala Gly Lys Ile Glu Lys Gly Arg Glu Leu Ser Leu Val
 50 55 60
 Gly Pro Phe Pro Gly Leu Asn Met Lys Ser Tyr Ala Gly Phe Leu Thr
 65 70 75 80
 Val Asn Lys Thr Tyr Asn Ser Asn Leu Phe Phe Trp Phe, Phe Pro Ala
 85 90 95
 Gln Ile Gln Pro Glu Asp Ala Pro Val Val Leu Trp Leu Gln Gly Gly
 100 105 110
 Pro Gly Gly Ser Ser Met Phe Gly Leu Phe Val Glu His Gly Pro Tyr
 115 120 125

| | | | | | | | | | | | | | | | |
|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Val | Val | Thr | Ser | Asn | Met | Thr | Leu | Arg | Asp | Arg | Asp | Phe | Pro | Trp | Thr |
| 130 | | | | | | | 135 | | | | | | | 140 | |
| Thr | Thr | Leu | Ser | Met | Leu | Tyr | Ile | Asp | Asn | Pro | Val | Gly | Thr | Gly | Phe |
| 145 | | | | | | | 150 | | | | | 155 | | | 160 |
| Ser | Phe | Thr | Asp | Asp | Thr | His | Gly | Tyr | Ala | Val | Asn | Glu | Asp | Asp | Val |
| | | | | | | | 165 | | | | 170 | | | 175 | |
| Ala | Arg | Asp | Leu | Tyr | Ser | Ala | Leu | Ile | Gln | Phe | Gln | Ile | Phe | Pro | |
| | | | | | | | 180 | | | 185 | | | 190 | | |
| Glu | Tyr | Lys | Asn | Asn | Asp | Phe | Tyr | Val | Thr | Gly | Glu | Ser | Tyr | Ala | Gly |
| | | | | | | | 195 | | | 200 | | | 205 | | |
| Lys | Tyr | Val | Pro | Ala | Ile | Ala | His | Leu | Ile | His | Ser | Leu | Asn | Pro | Val |
| | | | | | | | 210 | | | 215 | | | 220 | | |
| Arg | Glu | Val | Lys | Ile | Asn | Leu | Asn | Gly | Ile | Ala | Ile | Gly | Asp | Gly | Tyr |
| | | | | | | | 225 | | | 230 | | | 235 | | 240 |
| Ser | Asp | Pro | Glu | Ser | Ile | Ile | Gly | Gly | Tyr | Ala | Glu | Phe | Leu | Tyr | Gln |
| | | | | | | | 245 | | | | 250 | | | 255 | |
| Ile | Gly | Leu | Leu | Asp | Glu | Lys | Gln | Lys | Lys | Tyr | Phe | Gln | Lys | Gln | Cys |
| | | | | | | | 260 | | | 265 | | | 270 | | |
| His | Glu | Cys | Ile | Glu | His | Ile | Arg | Lys | Gln | Asn | Trp | Phe | Glu | Ala | Phe |
| | | | | | | | 275 | | | 280 | | | 285 | | |
| Glu | Ile | Leu | Asp | Lys | Leu | Leu | Asp | Gly | Asp | Leu | Thr | Ser | Asp | Pro | Ser |
| | | | | | | | 290 | | | 295 | | | 300 | | |
| Tyr | Phe | Gln | Asn | Val | Thr | Gly | Cys | Ser | Asn | Tyr | Tyr | Asn | Phe | Leu | Arg |
| | | | | | | | 305 | | | 310 | | | 315 | | 320 |
| Cys | Thr | Glu | Pro | Glu | Asp | Gln | Leu | Tyr | Tyr | Val | Lys | Phe | Leu | Ser | Leu |
| | | | | | | | 325 | | | | 330 | | | 335 | |
| Pro | Glu | Val | Arg | Gln | Ala | Ile | His | Val | Gly | Asn | Gln | Thr | Phe | Asn | Asp |
| | | | | | | | 340 | | | 345 | | | 350 | | |
| Gly | Thr | Ile | Val | Glu | Lys | Tyr | Leu | Arg | Glu | Asp | Thr | Val | Gln | Ser | Val |
| | | | | | | | 355 | | | 360 | | | 365 | | |
| Lys | Pro | Trp | Leu | Thr | Glu | Ile | Met | Asn | Asn | Tyr | Lys | Val | Leu | Ile | Tyr |
| | | | | | | | 370 | | | 375 | | | 380 | | |
| Asn | Gly | Gln | Leu | Asp | Ile | Ile | Val | Ala | Ala | Leu | Thr | Glu | Arg | Ser | |
| | | | | | | | 385 | | | 390 | | | 395 | | 400 |
| Leu | Met | Gly | Met | Asp | Trp | Lys | Gly | Ser | Gln | Glu | Tyr | Lys | Lys | Ala | Glu |
| | | | | | | | 405 | | | 410 | | | 415 | | |
| Lys | Lys | Val | *Trp | Lys | Ile | Phe | Lys | Ser | Asp | Ser | Glu | Val | Ala | Gly | Tyr |
| | | | | | | | 420 | | | 425 | | | 430 | | |
| Ile | Arg | Gln | 'Ala | Gly | Asp | Phe | His | Gln | Val | Ile | Ile | Arg | Gly | Gly | Gly |
| | | | | | | | 435 | | | 440 | | | 445 | | |
| His | Ile | Leu | Pro | Tyr | Asp | Gln | Pro | Leu | Arg | Ala | Phe | Asp | Met | Ile | Asn |
| | | | | | | | 450 | | | 455 | | | 460 | | |
| Arg | Phe | Ile | Tyr | Gly | Lys | Gly | Trp | Asp | Pro | Tyr | Val | Gly | | | |
| | | | | | | | 465 | | | 470 | | | 475 | | 477 |

<210> 1326
 <211> 160
 <212>Amino acid
 <213> Homo sapiens

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Arg | Asp | Glu | Arg | Ala | Lys | Val | Pro | Phe | Arg | Ser | Thr | Glu | Gly | Gly | Arg |
| 1 | | | | | | | 5 | | | 10 | | | 15 | | |
| Arg | Arg | Arg | Arg | Arg | Met | Glu | Ala | Val | Val | Phe | Val | Phe | Ser | Leu | Leu |
| | | | | | | | 20 | | | 25 | | | 30 | | |
| Asp | Cys | Cys | Ala | Leu | Ile | Phe | Leu | Ser | Val | Tyr | Phe | Ile | Ile | Thr | Leu |
| | | | | | | | 35 | | | 40 | | | 45 | | |
| Ser | Asp | Leu | Glu | Cys | Asp | Tyr | Ile | Asn | Ala | Arg | Ser | Cys | Cys | Ser | Lys |
| | | | | | | | 50 | | | 55 | | | 60 | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Asn | Lys | Trp | Val | Ile | Pro | Glu | Leu | Ile | Gly | His | Thr | Ile | Val | Thr |
| 65 | | | | 70 | | | | | 75 | | | | | | 80 |
| Val | Leu | Leu | Leu | Met | Ser | Leu | His | Trp | Phe | Ile | Phe | Leu | Leu | Asn | Leu |
| | | | | 85 | | | | | 90 | | | | | 95 | |
| Pro | Val | Ala | Thr | Trp | Asn | Ile | Tyr | Arg | Tyr | Ile | Met | Val | Pro | Ser | Gly |
| | | | | 100 | | | | 105 | | | | 110 | | | |
| Asn | Met | Gly | Val | Phe | Asp | Pro | Thr | Glu | Ile | His | Asn | Arg | Gly | Gln | Leu |
| | | | | 115 | | | | 120 | | | | 125 | | | |
| Lys | Ser | His | Met | Lys | Glu | Ala | Met | Ile | Lys | Leu | Gly | Phe | His | Leu | Leu |
| | | | | 130 | | | | 135 | | | 140 | | | | |
| Cys | Phe | Phe | Met | Tyr | Leu | Tyr | Ser | Met | Ile | Leu | Ala | Leu | Ile | Asn | Asp |
| | | | | 145 | | | | 150 | | | 155 | | | 160 | |

<210> 1327
<211> 131
<212>Amino acid
<213> Homo sapiens

| | | | | | | | | | | | | | | | |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <400> 1327 | | | | | | | | | | | | | | | |
| Gln | Ser | Pro | Gly | His | Gly | Ala | Pro | Cys | Gln | Leu | Ser | Ser | Ser | His | Ser |
| 1 | | | | | 5 | | | | | 10 | | | | 15 | |
| Arg | Ser | Asn | Arg | Leu | Leu | Ser | Pro | Met | Ala | Arg | Ala | Thr | Leu | Ser | Ala |
| | | | | | 20 | | | | 25 | | | 30 | | | |
| Ala | Pro | Ser | Asn | Pro | Arg | Leu | Leu | Arg | Val | Ala | Leu | Leu | Leu | Leu | Leu |
| | | | | | 35 | | | | 40 | | | 45 | | | |
| Leu | Val | Ala | Ala | Ser | Arg | Arg | Ala | Ala | Gly | Ala | Pro | Leu | Ala | Thr | Glu |
| | | | | 50 | | | | 55 | | | 60 | | | | |
| Leu | Arg | Cys | Gln | Cys | Leu | Gln | Thr | Leu | Gln | Gly | Ile | His | Leu | Lys | Asn |
| | | | | 65 | | | | 70 | | | 75 | | | 80 | |
| Ile | Gln | Ser | Val | Lys | Val | Lys | Ser | Pro | Gly | Pro | His | Cys | Ala | Gln | Thr |
| | | | | 85 | | | | 90 | | | 95 | | | | |
| Glu | Val | Ile | Ala | Thr | Leu | Lys | Asn | Gly | Gln | Lys | Ala | Cys | Leu | Asn | Pro |
| | | | | 100 | | | | 105 | | | 110 | | | | |
| Ala | Ser | Pro | Met | Val | Lys | Lys | Ile | Ile | Glu | Lys | Met | Leu | Lys | Asn | Gly |
| | | | | 115 | | | | 120 | | | 125 | | | | |
| Lys | Ser | Asn | | | | | | | | | | | | | |
| | | | | 130 | | | | 131 | | | | | | | |

<210> 1328
<211> 44
<212>Amino acid
<213> Homo sapiens

| | | | | | | | | | | | | | | | |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <400> 1328 | | | | | | | | | | | | | | | |
| His | Pro | Leu | Ser | Leu | Val | Phe | Leu | Ala | Leu | Asn | Thr | Gly | Lys | Glu | Lys |
| 1 | | | | | 5 | | | | 10 | | | 15 | | | |
| Ser | His | Pro | Gly | Gly | Gly | Gly | Gl | Arg | Pro | Gly | Leu | Ala | Gly | Gln | Gly |
| | | | | | 20 | | | | 25 | | | 30 | | | |
| Glu | Pro | Asp | His | Pro | Ala | Gly | Ala | Arg | Asp | Gly | Arg | | | | |
| | | | | | 35 | | | | 40 | | | 44 | | | |

<210> 1329
<211> 525
<212>Amino acid
<213> Homo sapiens

<400> 1329
Cys Thr Pro Val Ala Arg Ser Met Ala Thr Thr Ala Thr Cys Thr Arg
1 5 10 15
Phe Thr Asp Asp Tyr Gln Leu Phe Glu Glu Leu Gly Lys Gly Ala Phe
20 25 30
Ser Val Val Arg Arg Cys Val Lys Lys Thr Ser Thr Gln Glu Tyr Ala
35 40 45
Ala Lys Ile Ile Asn Thr Lys Lys Leu Ser Ala Arg Asp His Gln Lys
50 55 60
Leu Glu Arg Glu Ala Arg Ile Cys Arg Leu Leu Lys His Pro Asn Ile
65 70 75 80
Val Arg Leu His Asp Ser Ile Ser Glu Glu Gly Phe His Tyr Leu Val
85 90 95
Phe Asp Leu Val Thr Gly Gly Glu Leu Phe Glu Asp Ile Val Ala Arg
100 105 110
Glu Tyr Tyr Ser Glu Ala Asp Ala Ser His Cys Ile His Gln Ile Leu
115 120 125
Glu Ser Val Asn His Ile His Gln His Asp Ile Val His Arg Asp Leu
130 135 140
Lys Pro Glu Asn Leu Leu Leu Ala Ser Lys Cys Lys Gly Ala Ala Val
145 150 155 160
Lys Leu Ala Asp Phe Gly Leu Ala Ile Glu Val Gln Gly Glu Gln Gln
165 170 175
Ala Trp Phe Gly Phe Ala Gly Thr Pro Gly Tyr Leu Ser Pro Glu Val
180 185 190
Leu Arg Lys Asp Pro Tyr Gly Lys Pro Val Asp Ile Trp Ala Cys Gly
195 200 205
Val Ile Leu Tyr Ile Leu Leu Val Gly Tyr Pro Pro Phe Trp Asp Glu
210 215 220
Asp Gln His Lys Leu Tyr Gln Gln Ile Lys Ala Gly Ala Tyr Asp Phe
225 230 235 240
Pro Ser Pro Glu Trp Asp Thr Val Thr Pro Glu Ala Lys Asn Leu Ile
245 250 255
Asn Gln Met Leu Thr Ile Asn Pro Ala Lys Arg Ile Thr Ala Asp Gln
260 265 270
Ala Leu Lys His Pro Trp Val Cys Gln Arg Ser Thr Val Ala Ser Met
275 280 285
Met His Arg Gln Glu Thr Val Glu Cys Leu Arg Lys Phe Asn Ala Arg
290 295 300
Arg Lys Leu Lys Gly Ala Ile Leu Thr Thr Met Leu Val Ser Arg Asn
305 310 315 320
Phe Ser Ala Ala Lys Ser Leu Leu Asn Lys Lys Ser Asp Gly Gly Val
325 330 335
Lys Pro Gln Ser Asn Asn Lys Asn Ser Leu Val Ser Pro Ala Gln Glu
340 345 350
Pro Ala Pro Leu Gln Thr Ala Met Glu Pro Gln Thr Thr Val Val His
355 360 365
Asn Ala Thr Asp Gly Ile Lys Gly Ser Thr Glu Ser Cys Asn Thr Thr
370 375 380
Thr Glu Asp Glu Asp Leu Lys Val Arg Lys Gln Glu Ile Ile Lys Ile
385 390 395 400
Thr Glu Gln Leu Ile Glu Ala Ile Asn Asn Gly Asp Phe Glu Ala Tyr
405 410 415
Thr Lys Ile Cys Asp Pro Gly Leu Thr Ser Phe Glu Pro Glu Ala Leu
420 425 430

| | | |
|---|-----|-----|
| Gly Asn Leu Val Glu Gly Met Asp Phe His Lys Phe Tyr Phe Glu Asn | | |
| 435 | 440 | 445 |
| Leu Leu Ser Lys Asn Ser Lys Pro Ile His Thr Thr Ile Leu Asn Pro | | |
| 450 | 455 | 460 |
| His Val His Val Ile Gly Glu Asp Ala Ala Cys Ile Ala Tyr Ile Arg | | |
| 465 | 470 | 475 |
| Leu Thr Gln Tyr Ile Asp Gly Gln Gly Arg Pro Arg Thr Ser Gln Ser | | |
| 485 | 490 | 495 |
| Glu Glu Thr Arg Val Trp His Arg Arg Asp Gly Lys Trp Leu Asn Val | | |
| 500 | 505 | 510 |
| His Tyr His Cys Ser Gly Ala Pro Ala Ala Pro Leu Gln | | |
| 515 | 520 | 525 |

<210> 1330
<211> 205
<212>Amino acid
<213> Homo sapiens

| | | |
|---|-----|-----|
| <400> 1330 | | |
| Asn Arg Arg Thr Val Val Lys Met Leu Leu Glu Leu Ser Glu Glu His Lys | | |
| 1 | 5 | 10 |
| Glu His Leu Ala Phe Leu Pro Gln Val Asp Ser Ala Val Val Ala Glu | | |
| 20 | 25 | 30 |
| Phe Gly Arg Ile Ala Val Glu Phe Leu Arg Arg Gly Ala Asn Pro Lys | | |
| 35 | 40 | 45 |
| Ile Tyr Glu Gly Ala Ala Arg Lys Leu Asn Val Ser Ser Asp Thr Val | | |
| 50 | 55 | 60 |
| Gln His Gly Val Glu Gly Leu Thr Tyr Leu Leu Thr Glu Ser Ser Lys | | |
| 65 | 70 | 75 |
| Leu Met Ile Ser Glu Leu Asp Phe Gln Asp Ser Val Phe Val Leu Gly | | |
| 85 | 90 | 95 |
| Phe Ser Glu Glu Leu Asn Lys Leu Leu Leu Glu Leu Tyr Leu Asp Asn | | |
| 100 | 105 | 110 |
| Arg Lys Glu Ile Arg Thr Ile Leu Ser Glu Leu Ala Pro Ser Leu Pro | | |
| 115 | 120 | 125 |
| Ser Tyr His Asn Leu Glu Trp Arg Leu Asp Val Gln Leu Ala Ser Arg | | |
| 130 | 135 | 140 |
| Ser Leu Arg Gln Gln Ile Lys Pro Ala Val Thr Ile Lys Leu His Leu | | |
| 145 | 150 | 155 |
| Asn Gln Asn Gly Asp His Asn Thr Lys Val Leu Gln Thr Asp Pro Ala | | |
| 165 | 170 | 175 |
| Thr Leu Leu His Leu Val Gln Gln Leu Glu Gln Ala Leu Glu Glu Met | | |
| 180 | 185 | 190 |
| Lys Thr Asn His Cys Arg Arg Val Val Arg Asn Ile Lys | | |
| 195 | 200 | 205 |

<210> 1331
<211> 78
<212>Amino acid
<213> Homo sapiens

| | | |
|---|---|----|
| <400> 1331 | | |
| Gly Thr Ser Ile Tyr Leu Ala His Arg Val Ala Arg Ala Trp Glu Leu | | |
| 1 | 5 | 10 |
| | | 15 |

| | | |
|---|----|----|
| Ala Gln Phe Ile His His Thr Ser Lys Lys Ala Asp Val Val Leu Ala | | |
| 20 | 25 | 30 |
| Cys Gly Asp Ser Ile Val His Pro Glu Asp Leu Ile Cys Cys Pro Leu | | |
| 35 | 40 | 45 |
| Thr Gly Arg Ser Cys Leu Cys Asp Val His Leu Leu Ser Ser Leu Leu | | |
| 50 | 55 | 60 |
| Ala Arg Leu Gly Arg Gly Tyr Ala Val Ser Leu Thr Asn Leu | | |
| 65 | 70 | 75 |
| | | 78 |

<210> 1332
<211> 274
<212>Amino acid
<213> Homo sapiens

| | | |
|---|-----|-----|
| <400> 1332 | | |
| Arg Gly Cys Gly Ser Cys Gly Tyr Lys Pro Ser Ala Gly Pro Ala Trp | | |
| 1 | 5 | 10 |
| Arg Pro Arg Pro Pro Pro Ala Val Ser Pro Leu Arg His Pro Glu Pro | | |
| 20 | 25 | 30 |
| Ala Lys Val Leu Ser Phe Ser Ser Cys Pro Leu Pro Ala Leu Gly Arg | | |
| 35 | 40 | 45 |
| Thr Gly Pro Ser Arg Ala Ala Arg Ala Gln Ser Leu Thr Met Ala Ser | | |
| 50 | 55 | 60 |
| Leu Phe Lys Lys Lys Thr Val Asp Asp Val Ile Lys Glu Gln Asn Arg | | |
| 65 | 70 | 75 |
| Glu Leu Arg Gly Thr Gln Arg Ala Ile Ile Arg Asp Arg Ala Ala Leu | | |
| 85 | 90 | 95 |
| Glu Lys Gln Lys Gln Leu Glu Ile Lys Lys Met Ala Lys | | |
| 100 | 105 | 110 |
| Ile Gly Asn Lys Glu Ala Cys Lys Val Leu Ala Lys Gln Leu Val His | | |
| 115 | 120 | 125 |
| Leu Arg Lys Gln Lys Thr Arg Thr Phe Ala Val Ser Ser Lys Val Thr | | |
| 130 | 135 | 140 |
| Ser Met Ser Thr Gln Thr Lys Val Met Asn Ser Gln Met Lys Met Ala | | |
| 145 | 150 | 155 |
| Gly Ala Met Ser Thr Thr Ala Lys Thr Met Gln Ala Val Asn Lys Lys | | |
| 165 | 170 | 175 |
| Met Asp Pro Gln Lys Thr Leu Gln Thr Met Gln Asn Phe Gln Lys Glu | | |
| 180 | 185 | 190 |
| Asn Met Lys Met Glu Met Thr Glu Glu Met Ile Asn Asp Thr Leu Asp | | |
| 195 | 200 | 205 |
| Asp Ile Phe Asp Gly Ser Asp Asp Glu Glu Glu Ser Gln Asp Ile Val | | |
| 210 | 215 | 220 |
| Asn Gln Val Leu Asp Glu Ile Gly Ile Glu Ile Ser Gly Lys Met Ala | | |
| 225 | 230 | 235 |
| Lys Ala Pro Ser Ala Ala Arg Ser Leu Pro Ser Ala Ser Thr Ser Lys | | |
| 245 | 250 | 255 |
| Ala Thr Ile Ser Asp Glu Glu Ile Glu Arg Gln Leu Lys Ala Leu Gly | | |
| 260 | 265 | 270 |
| Val Asp | | |
| 274 | | |

<210> 1333
<211> 157
<212>Amino acid
<213> Homo sapiens

<400> 1333
 Ser Thr Asp Gly Asn Gly Ala Glu Arg Leu Phe Ala Glu Leu Arg Lys
 1 5 10 15
 Met Asn Ala Arg Gly Leu Gly Ser Glu Leu Lys Asp Ser Ile Pro Val
 20 25 30
 Thr Glu Leu Ser Ala Ser Gly Pro Phe Glu Ser His Asp Leu Leu Arg
 35 40 45
 Lys Gly Phe Ser Cys Val Lys Asn Glu Leu Leu Pro Ser His Pro Leu
 50 55 60
 'Glu Leu Ser Glu Lys Asn Phe Gln Leu Asn Gln Asp Lys Met Asn Phe
 65 70 75 80
 Ser Thr Leu Arg Asn Ile Gln Gly Leu Phe Ala Pro Leu Lys Leu Gln
 85 90 95
 Met Glu Phe Lys Ala Val Gln Gln Val Gln Arg Leu Pro Phe Leu Ser
 100 105 110
 Ser Ser Asn Leu Ser Leu Asp Val Leu Arg Gly Asn Asp Glu Thr Ile
 115 120 125
 Gly Phe Glu Asp Ile Leu Asn Asp Pro Ser Gln Ser Glu Val Met Gly
 130 135 140
 Glu Pro His Leu Met Val Glu Tyr Lys Leu Gly Leu Leu
 145 150 155 157

<210> 1334
<211> 193
<212>Amino acid
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(193)
<223> X = any amino acid or stop code

<400> 1334
 Arg Asn Met Lys Leu His Tyr Val Ala Val Leu Thr Leu Ala Ile Leu
 1 5 10 15
 Met Phe Leu Thr Trp Leu Pro Glu Ser Leu Ser Cys Asn Lys Ala Leu
 20 25 30
 Cys Ala Ser Asp Val Ser Lys Cys Leu Ile Gln Glu Leu Cys Gln Cys
 35 40 45
 Arg Pro Gly Glu Gly Asn Cys Ser Cys Cys Lys Glu Cys Met Leu Cys
 50 55 60
 Leu Gly Ala Leu Trp Asp Glu Cys Cys Asp Cys Val Gly Met Cys Asn
 65 70 75 80
 Pro Arg Asn Tyr Ser Asp Thr Pro Pro Thr Ser Lys Ser Thr Val Glu
 85 90 95
 Glu Leu His Glu Pro Ile Pro Ser Leu Phe Arg Ala Leu Thr Glu Gly
 100 105 110
 Asp Thr Gln Leu Asn Trp Asn Ile Val Ser Phe Pro Val Ala Glu Glu
 115 120 125
 Leu Ser His His Glu Asn Leu Val Ser Phe Leu Glu Thr Val Asn Gln
 130 135 140
 Pro His His Gln Asn Val Ser Val Pro Ser Asn Asn Val His Ala Pro
 145 150 155 160
 Tyr Ser Ser Asp Lys Glu Xaa Leu Pro Thr Val Asp Phe Phe His Ser
 165 170 175
 Ala Pro Ser Cys Gly Leu Ser Met Xaa Ser Ile Ile Phe Phe Glu Glu

| | | |
|-----|-----|-----|
| 180 | 185 | 190 |
| Thr | | |
| 193 | | |

<210> 1335
<211> 179
<212>Amino acid
<213> Homo sapiens

<400> 1335
Val Gly Gly Val Pro Thr Trp Leu Glu Gly Cys Gly Ser Gly Asn Pro
1 5 10 15
Ser Pro Arg Ser Gly Gly Pro Gly Ala Arg Leu Thr Leu Pro Ala
20 25 30
Leu Gln Met Thr Val His Asn Leu Tyr Leu Phe Asp Arg Asn Gly Val
35 40 45
Cys Leu His Tyr Ser Glu Trp His Arg Lys Lys Gln Ala Gly Ile Pro
50 55 60
Lys Glu Glu Glu Tyr Lys Leu Met Tyr Gly Met Leu Phe Ser Ile Arg
65 70 75 80
Ser Phe Val Ser Lys Met Ser Pro Leu Asp Met Lys Asp Gly Phe Leu
85 90 95
Ala Phe Gln Thr Ser Arg Tyr Lys Leu His Tyr Tyr Glu Thr Pro Thr
100 105 110
Gly Ile Lys Val Val Met Asn Thr Asp Leu Gly Val Gly Pro Ile Arg
115 120 125
Asp Val Leu His His Ile Tyr Ser Ala Leu Tyr Val Glu Leu Val Val
130 135 140
Lys Asn Pro Leu Cys Pro Leu Gly Gln Thr Val Gln Ser Glu Leu Phe
145 150 155 160
Arg Ser Arg Leu Asp Ser Tyr Val Arg Ser Leu Pro Phe Phe Ser Ala
165 170 175
Arg Ala Gly
179

<210> 1336
<211> 236
<212>Amino acid
<213> Homo sapiens

<400> 1336
Pro Gly Leu Ser Gln Glu Pro Ser Gly Ser Met Glu Thr Val Val Ile
1 5 10 15
Val Ala Ile Gly Val Leu Ala Thr Ile Phe Leu Ala Ser Phe Ala Ala
20 25 30
Leu Val Leu Val Cys Arg Gln Arg Tyr Cys Arg Pro Arg Asp Leu Leu
35 40 45
Gln Arg Tyr Asp Ser Lys Pro Ile Val Asp Leu Ile Gly Ala Met Glu
50 55 60
Thr Gln Ser Glu Pro Ser Glu Leu Glu Leu Asp Asp Val Val Ile Thr
65 70 75 80
Asn Pro His Ile Glu Ala Ile Leu Glu Asn Glu Asp Trp Ile Glu Asp
85 90 95
Ala Ser Gly Leu Met Ser His Cys Ile Ala Ile Leu Lys Ile Cys His

| | | |
|---|-----|---------|
| 100 | 105 | 110 |
| Thr Leu Thr Glu Lys Leu Val Ala Met Thr Met Gly Ser Gly Ala Lys | | |
| 115 | 120 | 125 |
| Met Lys Thr Ser Ala Ser Val Ser Asp Ile Ile Val Val Ala Lys Arg | | |
| 130 | 135 | 140 |
| Ile Ser Pro Arg Val Asp Asp Val Val Lys Ser Met Tyr Pro Pro Leu | | |
| 145 | 150 | 155 |
| Asp Pro Lys Leu Leu Asp Ala Arg Thr Thr Ala Leu Leu Ser Val | | |
| 165 | 170 | 175 |
| Ser His Leu Val Leu Val Thr Arg Asn Ala Cys His Leu Thr Gly Gly | | |
| 180 | 185 | 190 |
| Leu Asp Trp Ile Asp Gln Ser Leu Ser Ala Ala Glu Glu His Leu Glu | | |
| 195 | 200 | 205 |
| Val Leu Arg Glu Ala Ala Leu Ala Ser Glu Pro Asp Lys Gly Leu Pro | | |
| 210 | 215 | 220 |
| Gly Pro Glu Gly Phe Leu Gln Glu Gln Ser Ala Ile | | |
| 225 | 230 | 235 236 |

<210> 1337
<211> 161
<212>Amino acid
<213> Homo sapiens

| | | | |
|---|-----|-----|-----|
| 1 | 5 | 10 | 15 |
| His Trp Leu Leu Thr Thr Trp Gly Cys Ile Val Phe Ser Gly Ser Tyr | | | |
| 20 | 25 | 30 | |
| Ala Trp Ala Asn Phe Thr Ile Leu Ala Leu Gly Val Trp Ala Val Ala | | | |
| 35 | 40 | 45 | |
| Gln Arg Asp Ser Ile Asp Ala Ile Ser Met Phe Leu Gly Gly Leu Leu | | | |
| 50 | 55 | 60 | |
| Ala Thr Ile Phe Leu Asp Ile Val His Ile Ser Ile Phe Tyr Pro Arg | | | |
| 65 | 70 | 75 | 80 |
| Val Ser Leu Thr Asp Thr Gly Arg Phe Gly Val Gly Met Ala Ile Leu | | | |
| 85 | 90 | 95 | |
| Ser Leu Leu Leu Lys Pro Leu Ser Cys Cys Phe Val Tyr His Met Tyr | | | |
| 100 | 105 | 110 | |
| Arg Glu Arg Gly Gly Glu Leu Leu Val His Thr Gly Phe Leu Gly Ser | | | |
| 115 | 120 | 125 | |
| Ser Gln Asp Arg Ser Ala Tyr Gln Thr Ile Asp Ser Ala Glu Ala Pro | | | |
| 130 | 135 | 140 | |
| Ala Asp Pro Phe Ala Val Pro Glu Gly Arg Ser Gln Asp Ala Arg Gly | | | |
| 145 | 150 | 155 | 160 |
| Tyr | | | |
| 161 | | | |

<210> 1338
<211> 200
<212>Amino acid
<213> Homo sapiens

<400> 1338
Pro Ala Ser Arg Pro Leu Leu Gly Pro Asp Thr Gly Ser Val Ala Asn

| | | | |
|---|-----|-----|-----|
| 1 | 5 | 10 | 15 |
| Ile Phe Lys Gly Leu Val Ile Leu Pro Glu Met Ser Leu Val Ile Arg | | | |
| 20 | 25 | 30 | |
| Asn Leu Gln Arg Val Ile Pro Ile Arg Arg Ala Pro Leu Arg Ser Lys | | | |
| 35 | 40 | 45 | |
| Ile Glu Ile Val Arg Arg Ile Leu Gly Val Gln Lys Phe Asp Leu Gly | | | |
| 50 | 55 | 60 | |
| Ile Ile Cys Val Asp Asn Lys Asn Ile Gln His Ile Asn Arg Ile Tyr | | | |
| 65 | 70 | 75 | 80 |
| Arg Asp Arg Asn Val Pro Thr Asp Val Leu Ser Phe Pro Phe His Glu | | | |
| 85 | 90 | 95 | |
| His Leu Lys Ala Gly Glu Phe Pro Gln Pro Asp Phe Pro Asp Asp Tyr | | | |
| 100 | 105 | 110 | |
| Asn Leu Gly Asp Ile Phe Leu Gly Val Glu Tyr Ile Phe His Gln Cys | | | |
| 115 | 120 | 125 | |
| Lys Glu Asn Glu Asp Tyr Asn Asp Val Leu Thr Val Thr Ala Thr His | | | |
| 130 | 135 | 140 | |
| Gly Leu Cys His Leu Leu Gly Phe Thr His Gly Thr Glu Ala Glu Trp | | | |
| 145 | 150 | 155 | 160 |
| Gln Gln Met Phe Gln Lys Glu Lys Ala Val Leu Asp Glu Leu Gly Arg | | | |
| 165 | 170 | 175 | |
| Arg Thr Gly Thr Arg Leu Gln Pro Leu Thr Pro Gly Pro Leu Pro Glu | | | |
| 180 | 185 | 190 | |
| Gly Ala Glu Gly Arg Val Pro Phe | | | |
| 195 | 200 | | |

<210> 1339
 <211> 267
 <212>Amino acid
 <213> Homo sapiens

| | | | |
|---|-----|-----|-----|
| 1 | 5 | 10 | 15 |
| Leu Arg Asn Ala Leu Asp Val Leu His Arg Glu Val Pro Arg Val Leu | | | |
| 20 | 25 | 30 | |
| Val Asn Leu Val Asp Phe Leu Asn Pro Thr Ile Met Arg Gln Val Phe | | | |
| 35 | 40 | 45 | |
| Leu Gly Ser Lys Thr Glu Thr Ile Asp Leu Arg Ala Glu Met Pro Ile | | | |
| 50 | 55 | 60 | |
| Thr Cys Pro Thr Gln Asn Glu Pro Phe Leu Arg Thr Pro Arg Asn Ser | | | |
| 65 | 70 | 75 | 80 |
| Asn Tyr Thr Tyr Pro Ile Lys Pro Ala Ile Glu Asn Trp Gly Ser Asp | | | |
| 85 | 90 | 95 | |
| Phe Leu Cys Thr Glu Trp Lys Ala Ser Asn Ser Val Pro Thr Ser Val | | | |
| 100 | 105 | 110 | |
| His Gln Leu Arg Pro Ala Asp Ile Lys Val Val Ala Ala Leu Gly Asp | | | |
| 115 | 120 | 125 | |
| Ser Leu Thr Thr Ala Val Gly Ile Ala Arg Pro Asn Asn Ser Ser Asp Leu | | | |
| 130 | 135 | 140 | |
| Pro Thr Ser Trp Arg Gly Leu Ser Trp Ser Ile Gly Gly Asp Gly Asn | | | |
| 145 | 150 | 155 | 160 |
| Leu Glu Thr His Thr Leu Pro Asn Ile Leu Lys Lys Phe Asn Pro | | | |
| 165 | 170 | 175 | |
| Tyr Leu Leu Gly Phe Ser Thr Ser Trp Glu Gly Thr Ala Gly Leu | | | |
| 180 | 185 | 190 | |
| Asn Val Ala Ala Glu Gly Ala Arg Ala Arg Asp Met Pro Ala Gln Ala | | | |
| 195 | 200 | 205 | |
| Trp Asp Leu Val Glu Arg Met Lys Asn Ser Pro Asp Ile Asn Leu Glu | | | |

| | | | | |
|---|-----|-----|-----|-----|
| 210 | 215 | 220 | | |
| Lys Asp Trp Lys Leu Val Thr Leu Phe Ile Gly Asn Asp Leu Cys | 225 | 230 | 235 | 240 |
| His Tyr Cys Glu Asn Pro Glu Ala His Leu Ala Thr Glu Tyr Val Gln | 245 | 250 | 255 | |
| His Ile Gln Gln Ala Leu Asp Ile Leu Ser Glu | 260 | 265 | 267 | |

<210> 1340
<211> 286
<212>Amino acid
<213> Homo sapiens

| | | | | |
|---|-----|-----|-----|-----|
| <400> 1340 | | | | |
| Val Val Glu Phe Leu Trp Ser Arg Arg Pro Ser Gly Ser Ser Asp Pro | 1 | 5 | 10 | 15 |
| Arg Pro Arg Arg Pro Ala Ser Lys Cys Gln Met Met Glu Glu Arg Ala | 20 | 25 | 30 | |
| Asn Leu Met His Met Met Lys Leu Ser Ile Lys Val Leu Leu Gln Ser | 35 | 40 | 45 | |
| Ala Leu Ser Leu Gly Arg Ser Leu Asp Ala Asp His Ala Pro Leu Gln | 50 | 55 | 60 | |
| Gln Phe Phe Val Val Met Glu His Cys Leu Lys His Gly Leu Lys Val | 65 | 70 | 75 | 80 |
| Lys Lys Ser Phe Ile Gly Gln Asn Lys Ser Phe Phe Gly Pro Leu Glu | 85 | 90 | 95 | |
| Leu Val Glu Lys Leu Cys Pro Glu Ala Ser Asp Ile Ala Thr Ser Val | 100 | 105 | 110 | |
| Arg Asn Leu Pro Glu Leu Lys Thr Ala Val Gly Arg Gly Arg Ala Trp | 115 | 120 | 125 | |
| Leu Tyr Leu Ala Leu Met Gln Lys Leu Ala Asp Tyr Leu Lys Val | 130 | 135 | 140 | |
| Leu Ile Asp Asn Lys His Leu Leu Ser Glu Phe Tyr Glu Pro Glu Ala | 145 | 150 | 155 | 160 |
| Leu Met Met Glu Glu Gly Met Val Ile Val Gly Leu Leu Val Gly | 165 | 170 | 175 | |
| Leu Asn Val Leu Asp Ala Asn Leu Cys Leu Lys Gly Glu Asp Leu Asp | 180 | 185 | 190 | |
| Ser Gln Val Gly Val Ile Asp Phe Ser Leu Tyr Leu Lys Asp Val Gln | 195 | 200 | 205 | |
| Asp Leu Asp Gly Gly Lys Glu His Glu Arg Ile Thr Asp Val Leu Asp | 210 | 215 | 220 | |
| Gln Lys Asn Tyr Val Glu Glu Leu Asn Arg His Leu Ser Cys Thr Val | 225 | 230 | 235 | 240 |
| Gly Asp Leu Gln Thr Lys Ile Asp Gly Leu Glu Lys Thr Asn Ser Lys | 245 | 250 | 255 | |
| Leu Gln Glu Arg Val Ser Ala Ala Thr Asp Arg Ile Cys Ser Leu Gln | 260 | 265 | 270 | |
| Glu Glu Gln Gln Leu Arg Glu Gln Asn Glu Leu Ile Arg | 275 | 280 | 285 | 286 |

<210> 1341
<211> 233
<212>Amino acid
<213> Homo sapiens

<400> 1341
 Lys Pro Glu Gly Ala Arg Arg Val Gln Phe Val Met Gly Leu Phe Gly
 1 5 10 15
 Lys Thr Gln Glu Lys Pro Pro Lys Glu Leu Val Asn Glu Trp Ser Leu
 20 25 30
 Lys Ile Arg Lys Glu Met Arg Val Val Asp Arg Gln Ile Arg Asp Ile
 35 40 45
 Gln Arg Glu Glu Glu Lys Val Lys Arg Ser Val Lys Asp Ala Ala Lys
 50 55 60
 Lys Gly Gln Lys Asp Val Cys Ile Val Leu Ala Lys Glu Met Ile Arg
 65 70 75 80
 Ser Arg Lys Ala Val Ser Lys Leu Tyr Ala Ser Lys Ala His Met Asn
 85 90 95
 Ser Val Leu Met Gly Met Lys Asn Gln Leu Ala Val Leu Arg Val Ala
 100 105 110
 Gly Ser Leu Gln Lys Ser Thr Glu Val Met Lys Ala Met Gln Ser Leu
 115 120 125
 Val Lys Ile Pro Glu Ile Gln Ala Thr Met Arg Glu Leu Ser Lys Glu
 130 135 140
 Met Met Lys Ala Gly Ile Ile Glu Glu Met Leu Glu Asp Thr Phe Glu
 145 150 155 160
 Ser Met Asp Asp Gln Glu Glu Met Glu Glu Ala Glu Met Glu Ile
 165 170 175
 Asp Arg Ile Leu Phe Glu Ile Thr Ala Gly Ala Leu Gly Lys Ala Pro
 180 185 190
 Ser Lys Val Thr Asp Ala Leu Pro Glu Pro Glu Pro Pro Gly Ala Met
 195 200 205
 Ala Ala Ser Glu Asp Glu Glu Glu Glu Glu Ala Leu Glu Ala Met
 210 215 220
 Gln Ser Arg Leu Ala Thr Leu Arg Ser
 225 230 233

<210> 1342
<211> 150
<212> Amino acid
<213> Homo sapiens

<400> 1342
 Arg Trp Asn Ser Ile Met Glu Leu Ala Leu Leu Cys Gly Leu Val Val
 1 5 10 15
 Met Ala Gly Val Ile Pro Ile Gln Gly Gly Ile Leu Asn Leu Asn Lys
 20 25 30
 Met Val Lys Gln Val Thr Gly Lys Met Pro Ile Leu Ser Tyr Trp Pro
 35 40 45
 Tyr GLY Cys His Cys Gly Leu Gly Gly Arg Gly Gln Pro Lys Asp Ala
 50 55 60
 Thr Asp Trp Cys Cys Gln Thr His Asp Cys Cys Tyr Asp His Leu Lys
 65 70 75 80
 Thr Gln Gly Cys Gly Ile Tyr Lys Asp Tyr Tyr Arg Tyr Asn Phe Ser
 85 90 95
 Gln Gly Asn Ile His Cys Ser Asp Lys Gly Ser Trp Cys Glu Gln Gln
 100 105 110
 Leu Cys Ala Cys Asp Lys Glu Val Ala Phe Cys Leu Lys Arg Asn Leu
 115 120 125
 Asp Thr Tyr Gln Lys Arg Leu Arg Phe Tyr Trp Arg Pro His Cys Arg
 130 135 140
 Gly Gln Thr Pro Gly Cys

145

150

<210> 1343
<211> 127
<212>Amino acid
<213> Homo sapiens

<400> 1343
Lys Thr Val Ala Glu Glu Ala Ser Val Gly Asn Pro Glu Gly Ala Phe
1 5 10 15
Met Lys Met Leu Gln Ala Arg Lys Gln His Met Ser Thr Glu Leu Thr
20 25 30
Ile Glu Ser Glu Ala Pro Ser Asp Ser Ser Gly Ile Asn Leu Ser Gly
35 40 45
Phe Gly Ser Glu Gln Leu Asp Thr Asn Asp Glu Ser Asp Val Ser Ser
50 55 60
Ala Leu Ser Tyr Ile Leu Pro Tyr Leu Ser Leu Arg Asn Leu Gly Ala
65 70 75 80
Glu Ser Ile Leu Leu Pro Phe Thr Glu Gln Leu Phe Ser Asn Val Gln
85 90 95
Asp Gly Asp Arg Leu Leu Ser Ile Leu Lys Asn Asn Arg Lys Ser Pro
100 105 110
Ser Gln Ser Ser Leu Leu Gly Asn Lys Phe Lys Asn Lys Ile Phe
115 120 125 127

<210> 1344
<211> 126
<212>Amino acid
<213> Homo sapiens

<400> 1344
Leu Pro Leu Thr Leu Leu Leu Ala Ala Pro Phe Ala His Leu Leu Leu
1 5 10 15
Pro Pro Gly His Asp Gln Ser Pro Cys Trp His Pro Gly Pro Ala Leu
20 25 30
Ser Pro Gly Thr Leu Gly Pro Leu Ser Trp Ala Met Ala Asn Ser Gly
35 40 45
Leu Gln Leu Leu Gly Tyr Phe Leu Ala Leu Gly Gly Trp Val Gly Ile
50 55 60
Ile Ala Ser Thr Ala Leu Pro Gln Trp Lys Gln Ser Ser Tyr Ala Gly
65 70 75 80
Asp Ala Ser Ile Gln Leu Arg Ser Lys Val Phe Val Leu Glu Ser Glu
85 90 95
Trp Gly Gly Asp Ser Leu Gly Leu Pro Arg Asp Cys Gly Trp Ser Cys
100 105 110
Leu Leu His Ser Ala Val Arg Ser Glu Lys Gly Phe Trp Ser
115 120 125 126

<210> 1345
<211> 328
<212>Amino acid
<213> Homo sapiens

<400> 1345

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asp | Pro | Arg | Val | Arg | Pro | Pro | Leu | Leu | Gln | Pro | Pro | Pro | Pro | Leu | Leu |
| 1 | | | | | 5 | | | | 10 | | | | | 15 | |
| Pro | Arg | Leu | Val | Ile | Leu | Lys | Met | Ala | Pro | Leu | Asp | Leu | Asp | Lys | Tyr |
| | | | | | 20 | | | | 25 | | | | | 30 | |
| Val | Glu | Ile | Ala | Arg | Leu | Cys | Lys | Tyr | Leu | Pro | Glu | Asn | Asp | Leu | Lys |
| | | | | | 35 | | | | 40 | | | | | 45 | |
| Arg | Leu | Cys | Asp | Tyr | Val | Cys | Asp | Leu | Leu | Glu | Glu | Ser | Asn | Val | |
| | | | | | 50 | | | | 55 | | | | | 60 | |
| Gln | Pro | Val | Ser | Thr | Pro | Val | Thr | Val | Cys | Gly | Asp | Ile | His | Gly | Gln |
| | | | | | 65 | | | | 70 | | | | | 75 | |
| Phe | Tyr | Asp | Leu | Cys | Glu | Leu | Phe | Arg | Thr | Gly | Gly | Gln | Val | Pro | Asp |
| | | | | | 85 | | | | 90 | | | | | 95 | |
| Thr | Asn | Tyr | Ile | Phe | Met | Gly | Asp | Phe | Val | Asp | Arg | Gly | Tyr | Tyr | Ser |
| | | | | | 100 | | | | 105 | | | | | 110 | |
| Leu | Glu | Thr | Phe | Thr | Tyr | Leu | Ile | Ala | Leu | Lys | Ala | Lys | Trp | Pro | Asp |
| | | | | | 115 | | | | 120 | | | | | 125 | |
| Arg | Ile | Thr | Leu | Leu | Arg | Gly | Asn | His | Glu | Ser | Arg | Gln | Ile | Thr | Gln |
| | | | | | 130 | | | | 135 | | | | | 140 | |
| Val | Tyr | Gly | Phe | Tyr | Asp | Glu | Cys | Gln | Thr | Lys | Tyr | Gly | Asn | Ala | Asn |
| | | | | | 145 | | | | 150 | | | | | 155 | |
| Ala | Trp | Arg | Tyr | Cys | Thr | Lys | Val | Phe | Asp | Met | Leu | Thr | Val | Ala | Ala |
| | | | | | 165 | | | | 170 | | | | | 175 | |
| Leu | Ile | Asp | Glu | Gln | Ile | Leu | Cys | Val | His | Gly | Gly | Leu | Ser | Pro | Asp |
| | | | | | 180 | | | | 185 | | | | | 190 | |
| Ile | Lys | Thr | Leu | Asp | Gln | Ile | Arg | Thr | Ile | Glu | Arg | Asn | Gln | Glu | Ile |
| | | | | | 195 | | | | 200 | | | | | 205 | |
| Pro | His | Lys | Gly | Ala | Phe | Cys | Asp | Leu | Val | Trp | Ser | Asp | Pro | Glu | Asp |
| | | | | | 210 | | | | 215 | | | | | 220 | |
| Val | Asp | Thr | Trp | Ala | Ile | Ser | Pro | Arg | Gly | Ala | Gly | Trp | Leu | Phe | Gly |
| | | | | | 225 | | | | 230 | | | | | 235 | |
| Ala | Lys | Val | Thr | Asn | Glu | Phe | Val | His | Ile | Asn | Asn | Leu | Lys | Leu | Ile |
| | | | | | 245 | | | | 250 | | | | | 255 | |
| Cys | Arg | Ala | His | Gln | Leu | Val | His | Glu | Gly | Tyr | Lys | Phe | Met | Phe | Asp |
| | | | | | 260 | | | | 265 | | | | | 270 | |
| Glu | Lys | Leu | Val | Thr | Val | Trp | Ser | Ala | Pro | Asn | Tyr | Cys | Tyr | Arg | Cys |
| | | | | | 275 | | | | 280 | | | | | 285 | |
| Gly | Asn | Ile | Ala | Ser | Ile | Met | Val | Phe | Lys | Asp | Val | Asn | Thr | Arg | Glu |
| | | | | | 290 | | | | 295 | | | | | 300 | |
| Pro | Lys | Leu | Phe | Arg | Ala | Val | Pro | Asp | Ser | Glu | Arg | Val | Ile | Pro | Pro |
| | | | | | 305 | | | | 310 | | | | | 315 | |
| Arg | Thr | Thr | Thr | Pro | Tyr | Phe | Leu | | | | | | | 320 | |
| | | | | | 325 | | | | 328 | | | | | | |

<210> 1346

<211> 253

<212>Amino acid

<213> Homo sapiens

<400> 1346

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ser | Phe | Ala | Gly | Ala | Ala | Ala | Arg | Pro | Ser | Thr | Pro | Pro | Ala | Ser | Gly |
| 1 | | | | | 5 | | | | 10 | | | | | 15 | |
| Arg | Gly | Ala | Ala | Pro | Gly | Arg | Pro | Gly | Pro | Ser | Pro | Met | Asp | Leu | Arg |
| | | | | | 20 | | | | 25 | | | | | 30 | |
| Ala | Gly | Asp | Ser | Trp | Gly | Met | Leu | Ala | Cys | Leu | Cys | Thr | Val | Leu | Trp |

| | | | |
|---|-----|-----|-----|
| 35 | 40 | 45 | |
| His Leu Pro Ala Val Pro Ala Leu Asn Arg Thr Gly Asp Pro Gly Pro | | | |
| 50 | 55 | 60 | |
| Gly Pro Ser Ile Gln Lys Thr Tyr Asp Leu Thr Arg Tyr Leu Glu His | | | |
| 65 | 70 | 75 | 80 |
| Gln Leu Arg Ser Leu Ala Gly Thr Tyr Leu Asn Tyr Leu Gly Pro Pro | | | |
| 85 | 90 | 95 | |
| Phe Asn Glu Pro Asp Phe Asn Pro Pro Arg Leu Gly Ala Glu Thr Leu | | | |
| 100 | 105 | 110 | |
| Pro Arg Ala Thr Val Asp Leu Glu Val Trp Arg Ser Leu Asn Asp Lys | | | |
| 115 | 120 | 125 | |
| Leu Arg Leu Thr Gln Asn Tyr Glu Ala Tyr Ser His Leu Leu Cys Tyr | | | |
| 130 | 135 | 140 | |
| Leu Arg Gly Leu Asn Arg Gln Ala Ala Thr Ala Glu Leu Arg Arg Ser | | | |
| 145 | 150 | 155 | 160 |
| Leu Ala His Phe Cys Thr Ser Leu Gln Gly Leu Leu Gly Ser Ile Ala | | | |
| 165 | 170 | 175 | |
| Gly Val Met Ala Ala Leu Gly Tyr Pro Leu Pro Gln Pro Leu Pro Gly | | | |
| 180 | 185 | 190 | |
| Thr Glu Pro Thr Trp Thr Pro Gly Pro Ala His Ser Asp Phe Leu Gln | | | |
| 195 | 200 | 205 | |
| Lys Met Asp Asp Phe Trp Leu Leu Lys Glu Leu Gln Thr Trp Leu Trp | | | |
| 210 | 215 | 220 | |
| Arg Ser Ala Lys Asp Phe Asn Arg Leu Lys Lys Met Gln Pro Pro | | | |
| 225 | 230 | 235 | 240 |
| Ala Ala Ala Val Thr Leu His Leu Gly Ala His Gly Phe | | | |
| 245 | 250 | 253 | |

<210> 1347
 <211> 195
 <212>Amino acid
 <213> Homo sapiens

| | | | |
|---|-----|-----|-----|
| <400> 1347 | | | |
| Ile Lys Ile Ser Leu Lys Lys Arg Ser Met Ser Gly Ile Ser Gly Cys | | | |
| 1 | 5 | 10 | 15 |
| Pro Phe Leu Trp Gly Leu Leu Ala Leu Leu Gly Leu Ala Leu Val | | | |
| 20 | 25 | 30 | |
| Ile Ser Leu Ile Phe Asn Ile Ser His Tyr Val Glu Lys Gln Arg Gln | | | |
| 35 | 40 | 45 | |
| Asp Lys Met Tyr Ser Tyr Ser Ser Asp His Thr Arg Val Asp Glu Tyr | | | |
| 50 | 55 | 60 | |
| Tyr Ile Glu Asp Thr Pro Ile Tyr Gly Asn Leu Asp Asp Met Ile Ser | | | |
| 65 | 70 | 75 | 80 |
| Glu Pro Met Asp Glu Asn Cys Tyr Glu Gln Met Lys Ala Arg Pro Glu | | | |
| 85 | 90 | 95 | |
| Lys Ser Val Asn Lys Met Gln Glu Ala Thr Pro Ser Ala Gln Ala Thr | | | |
| 100 | 105 | 110 | |
| Asn Glu Thr Gln Met Cys Tyr Ala Ser Leu Asp His Ser Val Lys Gly | | | |
| 115 | 120 | 125 | |
| Lys Arg Arg Lys Pro Arg Lys Gln Asn Thr His Phe Ser Asp Lys Asp | | | |
| 130 | 135 | 140 | |
| Gly Asp Glu Gln Leu His Ala Ile Asp Ala Ser Val Ser Lys Thr Thr | | | |
| 145 | 150 | 155 | 160 |
| Leu Val Asp Ser Phe Ser Pro Glu Ser Gln Ala Val Glu Glu Asn Ile | | | |
| 165 | 170 | 175 | |
| His Asp Asp Pro Ile Arg Leu Phe Gly Leu Ile Arg Ala Lys Arg Glu | | | |
| 180 | 185 | 190 | |
| Pro Ile Asn | | | |

195

<210> 1348
 <211> 268
 <212>Amino acid
 <213> Homo sapiens

<400> 1348
 Val Glu Phe His Pro Gln Arg Ala Arg Ala Gly Ala Arg Ala Pro Ser
 1 5 10 15
 Met Gly Val Leu Leu Thr Gln Arg Thr Leu Leu Ser Leu Val Leu Ala
 20 25 30
 Leu Leu Phe Pro Ser Met Ala Ser Met Ala Ala Ile Gly Ser Cys Ser
 35 40 45
 Lys Glu Tyr Arg Val Leu Leu Gly Gln Leu Gln Lys Gln Thr Asp Leu
 50 55 60
 Met Gln Asp Thr Ser Arg Leu Leu Asp Pro Tyr Ile Arg Ile Gln Gly
 65 70 75 80
 Leu Asp Val Pro Lys Leu Arg Glu His Cys Arg Glu Arg Pro Gly Ala
 85 90 95
 Phe Pro Ser Glu Glu Thr Leu Arg Gly Leu Gly Arg Arg Cys Phe Leu
 100 105 110
 Gln Thr Leu Asn Ala Thr Leu Gly Cys Val Leu His Arg Leu Ala Asp
 115 120 125
 Leu Gln Gln Arg Leu Pro Lys Ala Gln Asp Leu Glu Arg Ser Gly Leu
 130 135 140
 Asn Ile Glu Asp Leu Glu Lys Leu Gln Met Ala Arg Pro Asn Ile Leu
 145 150 155 160
 Gly Leu Arg Asn Asn Ile Tyr Cys Met Ala Gln Leu Leu Asp Asn Ser
 165 170 175
 Asp Thr Ala Glu Pro Thr Lys Ala Gly Arg Gly Ala Ser Gln Pro Pro
 180 185 190
 Thr Pro Thr Pro Ala Ser Asp Ala Phe Gln Arg Lys Leu Glu Gly Cys
 195 200 205
 Arg Phe Leu His Gly Tyr His Arg Phe Met His Ser Val Gly Arg Val
 210 215 220
 Phe Ser Lys Trp Gly Glu Ser Pro Asn Arg Ser Arg Arg His Ser Pro
 225 230 235 240
 His Gln Ala Leu Arg Lys Gly Val Arg Arg Thr Arg Pro Ser Arg Lys
 245 250 255
 Gly Lys Arg Leu Met Thr Arg Gly Gln Leu Pro Arg
 260 265 268

<210> 1349
 <211> 138
 <212>Amino acid
 <213> Homo sapiens

<400> 1349
 Asp Phe Pro Gly Arg Arg Phe Arg Leu Val Trp Leu Leu Val Leu Arg
 1 5 10 15
 Leu Pro Trp Arg Val Pro Gly Gln Leu Asp Pro Thr Thr Gly Arg Arg
 20 25 30
 Phe Ser Glu His Lys Leu Cys Ala Asp Asp Glu Cys Ser Met Leu Met

| | | |
|---|-----|-----|
| 35 | 40 | 45 |
| Tyr Arg Gly Glu Ala Leu Glu Asp Phe Thr Gly Pro Asp Cys Arg Phe | | |
| 50 | 55 | 60 |
| Val Asn Phe Lys Lys Gly Asp Pro Val Tyr Val Tyr Tyr Lys Leu Ala | | |
| 65 | 70 | 75 |
| Arg Gly Trp Pro Glu Val Trp Ala Gly Ser Val Gly Arg Thr Phe Gly | | |
| 85 | 90 | 95 |
| Tyr Phe Pro Lys Asp Leu Ile Gln Val Val His Glu Tyr Thr Lys Glu | | |
| 100 | 105 | 110 |
| Glw Leu Gln Val Pro Thr Asn Glu Thr Asp Phe Val Cys Phe Asp Gly | | |
| 115 | 120 | 125 |
| Gly Arg Asp Asp Phe His Asn Tyr Asn Val | | |
| 130 | 135 | 138 |

<210> 1350
<211> 236
<212>Amino acid
<213> Homo sapiens

| | | |
|---|-----|---------|
| <400> 1350 | | |
| Ser Pro Leu Gly Lys Glu Gly Gln Glu Glu Val Arg Val Lys Ile Lys | | |
| 1 | 5 | 10 |
| Asp Leu Asn Glu His Ile Val Cys Cys Leu Cys Ala Gly Tyr Phe Val | | |
| 20 | 25 | 30 |
| Asp Ala Thr Thr Ile Thr Glu Cys Leu His Thr Phe Cys Lys Ser Cys | | |
| 35 | 40 | 45 |
| Ile Val Lys Tyr Leu Gln Thr Ser Lys Tyr Cys Pro Met Cys Asn Ile | | |
| 50 | 55 | 60 |
| Lys Ile His Glu Thr Gln Pro Leu Leu Asn Leu Lys Leu Asp Arg Val | | |
| 65 | 70 | 75 |
| Met Gln Asp Ile Val Tyr Lys Leu Val Pro Gly Leu Gln Asp Ser Glu | | |
| 85 | 90 | 95 |
| Glu Lys Arg Ile Arg Glu Phe Tyr Gln Ser Arg Gly Leu Asp Arg Val | | |
| 100 | 105 | 110 |
| Thr Gln Pro Thr Gly Glu Glu Pro Ala Leu Ser Asn Leu Gly Leu Pro | | |
| 115 | 120 | 125 |
| Phe Ser Ser Phe Asp His Ser Lys Ala His Tyr Tyr Arg Tyr Asp Glu | | |
| 130 | 135 | 140 |
| Gln Leu Asn Leu Cys Leu Glu Arg Leu Ser Ser Gly Lys Asp Lys Asn | | |
| 145 | 150 | 155 |
| Lys Ser Val Leu Gln Asn Lys Tyr Val Arg Cys Ser Val Arg Ala Glu | | |
| 165 | 170 | 175 |
| Val Arg His Leu Arg Arg Val Leu Cys His Arg Leu Met Leu Asn Pro | | |
| 180 | 185 | 190 |
| Gln His Val Gln Leu Leu Phe Asp Asn Glu Val Leu Pro Asp His Met | | |
| 195 | 200 | 205 |
| Thr Met Lys Gln Ile Trp Leu Ser Arg Trp Phe Gly Lys Pro Ser Pro | | |
| 210 | 215 | 220 |
| Leu Leu Leu Gln Tyr Ser Val Lys Glu Lys Arg Arg | | |
| 225 | 230 | 235 236 |

<210> 1351
<211> 178
<212>Amino acid
<213> Homo sapiens

<400> 1351
 Leu Trp Trp Tyr Ser Ala His Ala Ala Val Asp Ala Met Met Asp Val
 1 5 10 15
 Phe Gly Val Gly Phe Pro Ser Lys Val Pro Trp Lys Lys Met Ser Ala
 20 25 30
 Glu Glu Leu Glu Asn Gln Tyr Cys Pro Ser Arg Trp Val Val Arg Leu
 35 40 45
 Gly Ala Glu Glu Ala Leu Arg Thr Tyr Ser Gln Ile Gly Ile Glu Ala
 50 55 60
 Thr Thr Arg Ala Arg Ala Thr Arg Lys Ser Leu Leu His Val Pro Tyr
 65 70 75 80
 Gly Asp Gly Glu Gly Glu Lys Val Asp Ile Tyr Phe Pro Asp Glu Ser
 85 90 95
 Ser Glu Ala Thr Thr Arg Ala Arg Ala Thr Arg Lys Ser Leu Leu His
 100 105 110
 Val Pro Tyr Gly Asp Gly Glu Gly Glu Lys Val Asp Ile Tyr Phe Pro
 115 120 125
 Asp Glu Ser Ser Glu Ala Leu Pro Phe Phe Leu Phe Phe His Gly Gly
 130 135 140
 Tyr Trp Gln Ser Gly Arg His Pro Gly Pro His Gly Arg Pro Gly Asp
 145 150 155 160
 Pro Gln Arg Cys Val Cys Pro Glu Ala Val Ser Lys Gln Gln Ala Phe
 165 170 175
 Ser Trp
 178

<210> 1352
<211> 284
<212>Amino acid
<213> Homo sapiens

<400> 1352
 Gly Val Arg Met Ala Ser Arg Gly Arg Arg Pro Glu His Gly Gly Pro
 1 5 10 15
 Pro Glu Leu Phe Tyr Asp Glu Thr Glu Ala Arg Lys Tyr Val Arg Asn
 20 25 30
 Ser Arg Met Ile Asp Ile Gln Thr Arg Met Ala Gly Arg Ala Leu Glu
 35 40 45
 Leu Leu Tyr Leu Pro Glu Asn Lys Pro Cys Tyr Leu Leu Asp Ile Gly
 50 55 60
 Cys Gly Thr Gly Leu Ser Gly Ser Tyr Leu Ser Asp Glu Gly His Tyr
 65 70 75 80
 Trp Val Gly Leu Asp Ile Ser Pro Ala Met Leu Asp Glu Ala Val Asp
 85 90 95
 Arg Glu Ile Glu Gly Asp Leu Leu Gly Asp Met Gly Gln Gly Ile
 100 105 110
 Pro Phe Lys Pro Gly Thr Phe Asp Gly Cys Ile Ser Ile Ser Ala Val
 115 120 125
 Gln Trp Leu Cys Asn Ala Asn Lys Lys Ser Glu Asn Pro Ala Lys Arg
 130 135 140
 Leu Tyr Cys Phe Phe Ala Ser Leu Phe Ser Val Leu Val Arg Gly Ser
 145 150 155 160
 Arg Ala Val Leu Gln Leu Tyr Pro Glu Asn Ser Glu Gln Leu Glu Leu
 165 170 175
 Ile Thr Thr Gln Ala Thr Lys Ala Gly Phe Ser Gly Gly Met Val Val
 180 185 190
 Asp Tyr Pro Asn Ser Ala Lys Ala Lys Lys Phe Tyr Leu Cys Leu Phe

| | | |
|---|-----|-----|
| 195 | 200 | 205 |
| Ser Gly Pro Ser Thr Phe Ile Pro Glu Gly Leu Ser Glu Asn Gln Asp | | |
| 210 | 215 | 220 |
| Glu Val Glu Pro Arg Glu Ser Val Phe Thr Asn Glu Arg Phe Pro Leu | | |
| 225 | 230 | 235 |
| Arg Met Ser Arg Arg Gly Met Val Arg Lys Ser Arg Ala Trp Val Leu | | |
| 245 | 250 | 255 |
| Glu Lys Lys Glu Arg His Arg Arg Gln Gly Arg Glu Val Arg Pro Asp | | |
| 260 | 265 | 270 |
| Thr Gln Tyr Thr Gly Arg Lys Arg Lys Pro Arg Phe | | |
| 275 | 280 | 284 |

<210> 1353
<211> 363
<212> Amino acid
<213> Homo sapiens

| | | |
|---|-----|-----|
| <400> 1353 | | |
| Thr Leu Ile Cys Arg Met Ala Gly Cys Gly Glu Ile Asp His Ser Ile | | |
| 1 | 5 | 10 |
| Asn Met Leu Pro Thr Asn Arg Lys Ala Asn Glu Ser Cys Ser Asn Thr | | |
| 20 | 25 | 30 |
| Ala Pro Ser Leu Thr Val Pro Glu Cys Ala Ile Cys Leu Gln Thr Cys | | |
| 35 | 40 | 45 |
| Val His Pro Val Ser Leu Pro Cys Lys His Val Phe Cys Tyr Leu Cys | | |
| 50 | 55 | 60 |
| Val Lys Gly Ala Ser Trp Leu Gly Lys Arg Cys Ala Leu Cys Arg Gln | | |
| 65 | 70 | 75 |
| Glu Ile Pro Glu Asp Phe Leu Asp Lys Pro Thr Leu Leu Ser Pro Glu | | |
| 85 | 90 | 95 |
| Glu Leu Lys Ala Ala Ser Arg Gly Asn Gly Glu Tyr Ala Trp Tyr Tyr | | |
| 100 | 105 | 110 |
| Glu Gly Arg Asn Gly Trp Trp Gln Tyr Asp Glu Arg Thr Ser Arg Glu | | |
| 115 | 120 | 125 |
| Leu Glu Asp Ala Phe Ser Lys Gly Lys Asn Thr Glu Met Leu Ile | | |
| 130 | 135 | 140 |
| Ala Gly Phe Leu Tyr Val Ala Asp Leu Glu Asn Met Val Gln Tyr Arg | | |
| 145 | 150 | 155 |
| Arg Asn Glu His Gly Arg Arg Arg Lys Ile Lys Arg Asp Ile Ile Asp | | |
| 165 | 170 | 175 |
| Ile Pro Lys Lys Gly Val Ala Gly Leu Arg Leu Asp Cys Asp Ala Asn | | |
| 180 | 185 | 190 |
| Thr Val Asn Leu Ala Arg Glu Ser Ser Ala Asp Gly Ala Asp Ser Val | | |
| 195 | 200 | 205 |
| Ser Ala Gln Ser Gly Ala Ser Val Gln Pro Leu Val Ser Ser Val Arg | | |
| 210 | 215 | 220 |
| Pro Leu Thr Ser Val Asp Gly Gln Leu Thr Ser Pro Ala Thr Pro Ser | | |
| 225 | 230 | 235 |
| Pro Asp Ala Ser Thr Ser Leu Glu Asp Ser Phe Ala His Leu Gln Leu | | |
| 245 | 250 | 255 |
| Ser Gly Asp Asn Thr Ala Glu Arg Ser His Arg Gly Glu Gly Glu Glu | | |
| 260 | 265 | 270 |
| Asp His Glu Ser Pro Ser Ser Gly Arg Val Pro Ala Pro Asp Thr Ser | | |
| 275 | 280 | 285 |
| Ile Glu Glu Thr Glu Ser Asp Ala Ser Ser Asp Ser Glu Asp Val Ser | | |
| 290 | 295 | 300 |
| Ala Val Val Ala Gln His Ser Leu Thr Gln Gln Arg Leu Leu Val Ser | | |
| 305 | 310 | 315 |
| Asn Ala Asn Gln Thr Val Pro Asp Arg Ser Asp Arg Ser Gly Thr Asp | | |

| | | |
|---|-----|-----|
| 325 | 330 | 335 |
| Arg Ser Val Ala Gly Gly Gly Thr Val Ser Val Ser Val Arg Ser Arg | | |
| 340 | 345 | 350 |
| Arg Pro Asp Gly Gln Cys Thr Val Thr Glu Val | | |
| 355 | 360 | 363 |

<210> 1354
<211> 368
<212>Amino acid
<213> Homo sapiens

| | | |
|---|-----|-----|
| <400> 1354 | | |
| Gly Ala Thr Pro Leu Gly Ser Val Gly Gly Arg Thr Gly Lys Met Asp | | |
| 1 | 5 | 10 |
| Ala Ala Thr Leu Thr Tyr Asp Thr Leu Arg Phe Ala Glu Phe Glu Asp | | |
| 20 | 25 | 30 |
| Phe Pro Val Thr Ser Glu Pro Val Trp Ile Leu Gly Arg Lys Tyr Ser | | |
| 35 | 40 | 45 |
| Ile Phe Thr Glu Lys Asp Glu Ile Leu Ser Asp Val Ala Ser Arg Leu | | |
| 50 | 55 | 60 |
| Trp Phe Thr Tyr Arg Lys Asn Phe Pro Ala Ile Gly Gly Thr Gly Pro | | |
| 65 | 70 | 75 |
| Thr Ser Asp Thr Gly Trp Gly Cys Met Leu Arg Cys Gly Gln Met Ile | | |
| 85 | 90 | 95 |
| Phe Ala Gln Ala Leu Val Cys Arg His Leu Gly Arg Asp Trp Arg Trp | | |
| 100 | 105 | 110 |
| Thr Gln Arg Lys Arg Gln Pro Asp Ser Tyr Phe Ser Val Leu Asn Ala | | |
| 115 | 120 | 125 |
| Phe Ile Asp Arg Lys Asp Ser Tyr Tyr Ser Ile His Gln Ile Ala Gln | | |
| 130 | 135 | 140 |
| Met Gly Val Gly Glu Gly Lys Ser Ile Gly Gln Trp Tyr Gly Pro Asn | | |
| 145 | 150 | 155 |
| Thr Val Ala Gln Val Leu Lys Lys Leu Ala Val Phe Asp Thr Trp Ser | | |
| 165 | 170 | 175 |
| Ser Leu Ala Val His Ile Ala Met Asp Asn Thr Val Val Met Glu Glu | | |
| 180 | 185 | 190 |
| Ile Arg Arg Leu Cys Arg Thr Ser Val Pro Cys Ala Gly Ala Thr Ala | | |
| 195 | 200 | 205 |
| Phe Pro Ala Asp Ser Asp Arg His Cys Asn Gly Phe Pro Ala Gly Ala | | |
| 210 | 215 | 220 |
| Glu Val Thr Asn Arg Pro Ser Pro Trp Arg Pro Leu Val Leu Ile | | |
| 225 | 230 | 235 |
| Pro Leu Arg Leu Gly Leu Thr Asp Ile Asn Glu Ala Tyr Val Glu Thr | | |
| 245 | 250 | 255 |
| Leu Lys His Cys Phe Met Met Pro Gln Ser Leu Gly Val Ile Gly Gly | | |
| 260 | 265 | 270 |
| Lys Pro Asn Ser Ala His Tyr Phe Ile Gly Tyr Val Gly Glu Glu Leu | | |
| 275 | 280 | 285 |
| Ile Tyr Leu Asp Pro His Thr Thr Gln Pro Ala Val Glu Pro Thr Asp | | |
| 290 | 295 | 300 |
| Gly Cys Phe Ile Pro Asp Glu Ser Phe His Cys Gln His Pro Pro Cys | | |
| 305 | 310 | 315 |
| Arg Met Ser Ile Ala Glu Leu Asp Pro Ser Ile Ala Val Val Arg Gly | | |
| 325 | 330 | 335 |
| Gly His Leu Ser Thr Gln Ala Phe Gly Ala Glu Cys Cys Leu Gly Met | | |
| 340 | 345 | 350 |
| Thr Arg Lys Thr Phe Gly Phe Leu Arg Phe Phe Ser Met Leu Gly | | |
| 355 | 360 | 365 |
| | | 368 |

<210> 1355
<211> 117
<212>Amino acid
<213> Homo sapiens

<400> 1355
Pro Thr Thr Ser Asn Arg Ala Ile Thr Leu Thr Ala Trp Pro Lys Ile
1 5 10 15
Pro Phe Leu Gly Ile Cys Glu Ala Lys Asn Pro Arg Ser Glu Asn Met
20 25 30
Arg Leu Ala Thr Ile Leu Glu Val Ala Cys His His Leu Gly Ser Gly
35 40 45
Pro Pro Pro Ser Trp Glu Leu Trp Glu Gln Gly Pro Pro Gly Asn Ser
50 55 60
Ser Arg Tyr Ile Glu Phe Leu Asn Lys His Thr Tyr Ile Lys Gly Thr
65 70 75 80
Leu Arg Val Tyr Thr Lys Lys Phe Cys Met Leu Val Ile Lys Ser Phe
85 90 95
Glu Ser Lys Ser Cys Val Cys Val Tyr Asp Phe Asp Ser Lys Ser Ser
100 105 110
Val Asn Val Thr Val
115 117

<210> 1356
<211> 126
<212>Amino acid
<213> Homo sapiens

<400> 1356
Pro Arg Val Arg Phe Arg Leu Leu His Val Thr Ser Ile Arg Ser Ala
1 5 10 15
Trp Ile Leu Cys Gly Ile Ile Trp Ile Leu Ile Met Ala Ser Ser Ile
20 25 30
Met Leu Leu Asp Ser Gly Ser Glu Gln Asn Gly Ser Val Thr Ser Cys
35 40 45
Leu Glu Leu Asn Leu Tyr Lys Ile Ala Lys Leu Gln Thr Val Asn Tyr
50 55 60
Ile Ala Leu Val Val Gly Cys Leu Leu Pro Phe Phe Thr Leu Ser Ile
65 70 75 80
Cys Tyr Leu Leu Ile Ile Arg Val Leu Leu Lys Val Glu Val Pro Glu
85 90 95
Ser Gly Leu Arg Val Ser His Arg Lys Ala Leu Thr Thr Ile Ile Ile
100 105 110
Thr Leu Ile Ile Phe Phe Leu Cys Phe Leu Pro Tyr His Thr
115 120 125 126

<210> 1357
<211> 222
<212>Amino acid
<213> Homo sapiens

<400> 1357

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gly | Arg | His | Trp | Leu | Gly | Ser | Ala | Gln | Leu | Thr | Asp | Gly | Gly | Ser | Ala |
| 1 | | | | 5 | | | | | 10 | | | | | | 15 |
| Arg | Lys | Pro | Lys | Met | Ala | Val | Pro | Ala | Ala | Leu | Ile | Leu | Arg | Glu | Ser |
| | | | | 20 | | | | | 25 | | | | | 30 | |
| Pro | Ser | Met | Lys | Lys | Ala | Val | Ser | Leu | Ile | Asn | Ala | Ile | Asp | Thr | Gly |
| | | | | 35 | | | | 40 | | | | | 45 | | |
| Arg | Phe | Pro | Arg | Leu | Leu | Thr | Arg | Ile | Leu | Gln | Lys | Leu | His | Leu | Lys |
| | | | | 50 | | | | 55 | | | 60 | | | | |
| Ala | Glu | Ser | Ser | Phe | Ser | Glu | Glu | Glu | Glu | Lys | Leu | Gln | Ala | Ala | |
| | | | | 65 | | | | 70 | | 75 | | | | 80 | |
| Phe | Ser | Leu | Glu | Lys | Gln | Asp | Leu | His | Leu | Val | Leu | Glu | Thr | Ile | Ser |
| | | | | 85 | | | | 90 | | | | | 95 | | |
| Phe | Ile | Leu | Glu | Gln | Ala | Val | Tyr | His | Val | Lys | Pro | Ala | Ala | Leu | |
| | | | | 100 | | | | 105 | | | | 110 | | | |
| Gln | Gln | Gln | Ieu | Glu | Asn | Ile | His | Leu | Arg | Gln | Asp | Lys | Ala | Glu | Ala |
| | | | | 115 | | | | 120 | | | 125 | | | | |
| Phe | Val | Asn | Thr | Trp | Ser | Ser | Met | Gly | Gln | Glu | Thr | Val | Glu | Lys | Phe |
| | | | | 130 | | | | 135 | | | 140 | | | | |
| Arg | Gln | Arg | Ile | Leu | Ala | Pro | Cys | Lys | Leu | Glu | Thr | Val | Gly | Trp | Gln |
| | | | | 145 | | | | 150 | | | 155 | | | 160 | |
| Leu | Asn | Leu | Gln | Met | Ala | His | Ser | Ala | Gln | Ala | Lys | Leu | Lys | Ser | Pro |
| | | | | 165 | | | | 170 | | | 175 | | | | |
| Gln | Ala | Val | Leu | Gln | Leu | Gly | Val | Asn | Asn | Glu | Asp | Ser | Lys | Ser | Leu |
| | | | | 180 | | | | 185 | | | 190 | | | | |
| Glu | Lys | Val | Leu | Val | Glu | Phe | Ser | His | Lys | Glu | Leu | Phe | Asp | Phe | Tyr |
| | | | | 195 | | | | 200 | | | 205 | | | | |
| Asn | Lys | Leu | Glu | Thr | Ile | Gln | Ala | Gln | Leu | Asp | Ser | Leu | Thr | | |
| | | | | 210 | | | | 215 | | | 220 | | | 222 | |

<210> 1358
 <211> 116
 <212>Amino acid
 <213> Homo sapiens

<400> 1358

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Glu | Ala | Ser | Ser | Ala | Lys | Thr | Lys | Arg | Lys | Glu | Glu | Lys | Gly | Pro | Lys |
| 1 | | | | 5 | | | | | 10 | | | | | | 15 |
| Ala | Lys | Met | Lys | Leu | Met | Val | Leu | Val | Phe | Thr | Ile | Gly | Leu | Thr | Leu |
| | | | | 20 | | | | 25 | | | 30 | | | | |
| Leu | Leu | Gly | Val | Gln | Ala | Met | Pro | Ala | Asn | Arg | Leu | Ser | Cys | Tyr | Arg |
| | | | | 35 | | | | 40 | | | 45 | | | | |
| Lys | Ile | Leu | Lys | Asp | His | Asn | Cys | His | Asn | Leu | Pro | Glu | Gly | Val | Ala |
| | | | | 50 | | | | 55 | | | 60 | | | | |
| Asp | Leu | Thr | Gln | Ile | Asp | Val | Asn | Val | Gln | Asp | His | Phe | Trp | Asp | Gly |
| | | | | 65 | | | | 70 | | | 75 | | | 80 | |
| Lys | Gly | Cys | Glu | Met | Ile | Cys | Tyr | Cys | Asn | Phe | Ser | Glu | Leu | Leu | Cys |
| | | | | 85 | | | | 90 | | | 95 | | | | |
| Cys | Pro | Lys | Asp | Val | Phe | Phe | Gly | Pro | Lys | Ile | Ser | Phe | Val | Ile | Pro |
| | | | | 100 | | | | 105 | | | 110 | | | | |
| Cys | Asn | Asn | Gln | | | | | | | | | | | | |
| | | | | 115 | | | | 116 | | | | | | | |

<210> 1359

<211> 466
<212>Amino acid
<213> Homo sapiens

<400> 1359
Lys Met Ala Glu Ala Val Phe His Ala Pro Lys Arg Lys Arg Arg Val
1 5 10 15
Tyr Glu Thr Tyr Glu Ser Pro Leu Pro Ile Pro Phe Gly Gln Asp His
20 25 30
Gly Pro Leu Lys Glu Phe Lys Ile Phe Arg Ala Glu Met Ile Asn Asn
35 40 45
Asn Val Ile Val Arg Asn Ala Glu Asp Ile Glu Gln Leu Tyr Gly Lys
50 55 60
Gly Tyr Phe Gly Lys Gly Ile Leu Ser Arg Ser Arg Pro Ser Phe Thr
65 70 75 80
Ile Ser Asp Pro Lys Ile Val Ala Lys Trp Lys Asp Met Lys Thr Asn
85 90 95
Met Pro Ile Ile Thr Ser Lys Arg Tyr Gln His Ser Val Glu Trp Ala
100 105 110
Ala Glu Leu Met Arg Arg Gln Gly Lys Asp Glu Ser Thr Val Arg Arg
115 120 125
Ile Leu Lys Asp Tyr Thr Lys Pro Leu Glu His Pro Pro Val Lys Arg
130 135 140
Asn Glu Glu Ala Gln His Asp Lys Leu Asn Ser Gly Met Val Ser
145 150 155 160
Asn Met Glu Gly Thr Ala Gly Gly Glu Arg Pro Ser Val Val Asn Gly
165 170 175
Asp Ser Gly Lys Ser Gly Gly Val Gly Asp Pro Arg Glu Pro Leu Gly
180 185 190
Cys Leu Gln Glu Gly Ser Gly Cys His Pro Thr Thr Glu Ser Phe Glu
195 200 205
Lys Ser Val Arg Glu Asp Ala Ser Pro Leu Pro His Val Cys Cys Cys
210 215 220
Lys Gln Asp Ala Leu Ile Leu Gln Arg Gly Leu His His Glu Asp Gly
225 230 235 240
Ser Gln His Ile Gly Leu Leu His Pro Gly Asp Arg Gly Pro Asp His
245 250 255
Glu Tyr Val Leu Val Glu Glu Ala Glu Cys Ala Met Ser Glu Arg Glu
260 265 270
Ala Ala Pro Asn Glu Glu Leu Val Gln Arg Asn Arg Leu Ile Cys Arg
275 280 285
Arg Asn Pro Tyr Arg Ile Phe Glu Tyr Leu Gln Leu Ser Leu Glu Glu
290 295 300
Ala Phe Phe Leu Val Tyr Ala Leu Gly Cys Leu Ser Ile Tyr Tyr Glu
305 310 315 320
Lys Glu Pro Leu Thr Ile Val Lys Leu Trp Lys Ala Phe Thr Val Val
325 330 335
Gln Pro Thr Phe Arg Thr Thr Tyr Met Ala Tyr His Tyr Phe Arg Ser
340 345 350
Lys Gly Trp Val Pro Lys Val Gly Leu Lys Tyr Gly Thr Asp Leu Leu
355 360 365
Leu Tyr Arg Lys Gly Pro Pro Phe Tyr His Ala Ser Tyr Ser Val Ile
370 375 380
Ile Glu Ile Val Asp Asp His Phe Glu Gly Ser Leu Arg Arg Pro Leu
385 390 395 400
Ser Trp Lys Ser Leu Ala Ala Leu Ser Arg Val Ser Val Asn Val Ser
405 410 415 420
Lys Glu Leu Met Leu Cys Tyr Leu Ile Lys Pro Ser Thr Met Thr Asp
420 425 430
Lys Glu Met Glu Ser Pro Glu Cys Met Lys Arg Ile Lys Val Gln Glu

| | | |
|-----------------------------|-------------------------------------|-----|
| 435 | 440 | 445 |
| Val Ile Leu Ser Arg Trp Val | Ser Ser Arg Glu Arg Ser Asp Gln Asp | |
| 450 | 455 | 460 |
| Asp Leu | | |
| 465 | 466 | |

<210> 1360
<211> 419
<212>Amino acid
<213> Homo sapiens

| | | |
|---|-----|-----|
| <400> 1360 | | |
| Arg Asp Ile Trp Thr Met Asn Leu Gln Arg Tyr Trp Gly Glu Ile Pro | | |
| 1 | 5 | 10 |
| Ile Ser Ser Ser Gln Thr Asn Arg Ser Ser Phe Asp Leu Leu Pro Arg | | |
| 20 | 25 | 30 |
| Glu Phe Arg Leu Val Glu Val His Asp Pro Pro Leu His Gln Pro Ser | | |
| 35 | 40 | 45 |
| Ala Asn Lys Pro Lys Pro Pro Thr Met Leu Asp Ile Pro Ser Glu Pro | | |
| 50 | 55 | 60 |
| Cys Ser Leu Thr Ile His Thr Ile Gln Leu Ile Gln His Asn Arg Arg | | |
| 65 | 70 | 75 |
| Leu Arg Asn Leu Ile Ala Thr Ala Gln Ala Gln Asn Gln Gln Thr | | |
| 85 | 90 | 95 |
| Glu Gly Val Lys Thr Glu Glu Ser Glu Pro Leu Pro Ser Cys Pro Gly | | |
| 100 | 105 | 110 |
| Ser Pro Pro Leu Pro Asp Asp Leu Ile Pro Leu Asp Cys Lys Asn Pro | | |
| 115 | 120 | 125 |
| Asn Ala Pro Phe Gln Ile Arg His Ser Asp Pro Glu Ser Asp Phe Tyr | | |
| 130 | 135 | 140 |
| Arg Gly Lys Gly Glu Pro Val Thr Glu Leu Ser Trp His Ser Cys Arg | | |
| 145 | 150 | 155 |
| Gln Leu Leu Tyr Gln Ala Val Ala Thr Ile Leu Ala His Ala Gly Phe | | |
| 165 | 170 | 175 |
| Asp Cys Ala Asn Glu Ser Val Leu Glu Thr Leu Thr Asp Val Ala His | | |
| 180 | 185 | 190 |
| Glu Tyr Cys Leu Lys Phe Thr Lys Leu Leu Arg Phe Ala Val Asp Arg | | |
| 195 | 200 | 205 |
| Glu Ala Arg Leu Gly Gln Thr Pro Phe Pro Asp Val Met Glu Gln Val | | |
| 210 | 215 | 220 |
| Phe His Glu Val Gly Ile Gly Ser Val Leu Ser Leu Gln Lys Phe Trp | | |
| 225 | 230 | 235 |
| Gln His Arg Ile Lys Asp Tyr His Ser Tyr Met Leu Gln Ile Ser Lys | | |
| 245 | 250 | 255 |
| Gln Leu Ser Glu Glu Tyr Glu Arg Ile Val Asn Pro Glu Lys Ala Thr | | |
| 260 | 265 | 270 |
| Glu Asp Ala Lys Pro Val Lys Ile Lys Glu Glu Pro Val Ser Asp Ile | | |
| 275 | 280 | 285 |
| Thr Phe Pro Val Ser Glu Glu Leu Glu Ala Asp Leu Ala Ser Gly Asp | | |
| 290 | 295 | 300 |
| Gln Ser Leu Pro Met Gly Val Leu Gly Ala Gln Ser Glu Arg Phe Pro | | |
| 305 | 310 | 315 |
| Ser Asn Leu Glu Val Glu Ala Ser Pro Gln Ala Ser Ser Ala Glu Val | | |
| 325 | 330 | 335 |
| Asn Ala Ser Pro Leu Trp Asn Leu Ala His Val Lys Met Glu Pro Gln | | |
| 340 | 345 | 350 |
| Glu Ser Glu Glu Gly Asn Val Ser Gly His Gly Val Leu Gly Ser Asp | | |
| 355 | 360 | 365 |
| Val Phe Glu Glu Pro Met Ser Gly Met Ser Glu Ala Gly Ile Pro Gln | | |

| | | |
|---|-----|-----|
| 370 | 375 | 380 |
| Ser Pro Asp Asp Ser Asp Ser Ser Tyr Gly Ser His Ser Thr Asp Ser | | |
| 385 | 390 | 395 |
| Leu Met Gly Ser Ser Pro Val Phe Asn Gln Arg Cys Lys Lys Arg Met | | |
| 405 | 410 | 415 |
| Arg Lys Ile | | |
| 419 | | |

<210> 1361
<211> 220
<212>Amino acid
<213> Homo sapiens

| | | |
|---|-----|-----|
| <400> 1361 | | |
| Arg Glu Gln Ile Leu Phe Ile Glu Ile Arg Asp Thr Ala Lys Gly Gly | | |
| 1 | 5 | 10 |
| Glu Thr Glu Gln Pro Pro Ser Leu Ser Pro Leu His Gly Gly Arg Met | | |
| 20 | 25 | 30 |
| Pro Glu Met Gly Glu Gly Ile Gln Ser Leu Ala Arg Glu Thr Gln Ser | | |
| 35 | 40 | 45 |
| His Arg Gly Arg Arg Gln Gly Trp Asp Ala Thr Trp Val Thr Arg Cys | | |
| 50 | 55 | 60 |
| Arg Glu Ser Leu Asn Arg Gly Gly Ala Gly Gly Lys Arg Ala Gly | | |
| 65 | 70 | 75 |
| Ala Leu Ala His His Val Phe Leu Ala Leu Ile Glu Pro Asn Leu Ala | | |
| 85 | 90 | 95 |
| Glu Arg Glu Ala Ser Glu Glu Glu Val Lys Ala Cys Ser Asp Glu Thr | | |
| 100 | 105 | 110 |
| Val Val Ala Asp Leu Leu Val Lys Val Val Tyr Val Leu Gly Ala Ile | | |
| 115 | 120 | 125 |
| Leu Lys Ile Phe Leu Arg Glu Gly Asn Val Leu Asn Gln His Ser Gly | | |
| 130 | 135 | 140 |
| Met Asp Ile Glu Lys Tyr Ser Glu His Tyr Gln His Asp His Ser Pro | | |
| 145 | 150 | 155 |
| Gly Ala Glu Asp Asp Ala Ala Gly Gly Gln Leu Arg Pro Thr Ala Gln | | |
| 165 | 170 | 175 |
| Glu Arg Arg His Lys Glu Gly Ser Arg Gly Ser Pro Arg Cys Lys Arg | | |
| 180 | 185 | 190 |
| Ala Arg Lys Ala Val Gly Glu Ser Pro Gly Cys Pro Arg Pro Arg Val | | |
| 195 | 200 | 205 |
| Arg Pro Arg Val Arg Pro Arg Val Arg Pro Arg Val | | |
| 210 | 215 | 220 |

<210> 1362
<211> 82
<212>Amino acid
<213> Homo sapiens

| | | |
|---|----|----|
| <400> 1362 | | |
| Gly Thr Arg Gly Cys Cys Arg Glu Gly Thr Ala Tyr Ala Lys Ala Tyr | | |
| 1 | 5 | 10 |
| Gln Phe Met Ala Ser His Leu Ser Leu Gly Lys Pro Val Ser Thr Gly | | |
| 20 | 25 | 30 |
| Ser Ile Pro Arg Phe Asn Lys Ala Leu Phe Asn Lys Gln Ala Lys Cys | | |

| | | |
|---|----|-----------------|
| 35 | 40 | 45 |
| Lys Pro Asn His Tyr Ser Phe Ile Gly Leu Ser Met | | Leu Ser Pro Glu |
| 50 | 55 | 60 |
| Asn Phe Ser Ile Gly Cys Tyr Ser Val Trp Phe Ser Glu Thr Lys | | |
| 65 | 70 | 75 |
| Gly Phe | | 80 |
| 82 | | |

<210> 1363
<211> 143
<212>Amino acid
<213> Homo sapiens

| | | | |
|---|-----|-----|-----|
| <400> 1363 | | | |
| Gly Ala Gln Gly Val Arg Val Gly Ile Gly Glu Val Gly Arg Val Gln | | | |
| 1 | 5 | 10 | 15 |
| Ala Pro Arg Val Ser Leu Leu His Ser Gln Gly Val Pro Arg Gly Gly | | | |
| 20 | 25 | 30 | |
| Thr Gly Glu Ala Val Lys Glu Glu Gly Arg Gly Ser Ser Leu His Pro | | | |
| 35 | 40 | 45 | |
| Pro Leu Pro Pro Gln Gly Leu Gly Glu Tyr Ala Ala Cys Gln Ser His | | | |
| 50 | 55 | 60 | |
| Ala Phe Met Lys Gly Val Phe Thr Phe Val Thr Gly Thr Gly Met Ala | | | |
| 65 | 70 | 75 | 80 |
| Phe Gly Leu Gln Met Phe Ile Gln Arg Lys Phe Pro Tyr Pro Leu Gln | | | |
| 85 | 90 | 95 | |
| Trp Ser Leu Leu Val Ala Val Val Ala Gly Ser Val Val Ser Tyr Gly | | | |
| 100 | 105 | 110 | |
| Val Thr Arg Val Glu Ser Glu Lys Cys Asn Asn Leu Trp Leu Phe Leu | | | |
| 115 | 120 | 125 | |
| Glu Thr Gly Gln Leu Pro Lys Asp Arg Ser Thr Asp Gln Arg Ser | | | |
| 130 | 135 | 140 | 143 |

<210> 1364
<211> 194
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(194)
<223> X = any amino acid or stop code

| | | | |
|---|----|----|----|
| <400> 1364 | | | |
| Gly Thr Ser Glu Leu Leu Cys Ile Gln Arg Trp Asn Trp Gly Pro Ala | | | |
| 1 | 5 | 10 | 15 |
| Phe Pro Pro Arg Pro Gly Leu Ala Leu Ala Pro Thr Leu Gln Leu Leu | | | |
| 20 | 25 | 30 | |
| Val Glu Met Gly Ser Ala Lys Ser Val Pro Val Thr Pro Ala Arg Pro | | | |
| 35 | 40 | 45 | |
| Pro Pro His Asn Lys His Leu Ala Arg Val Ala Asp Pro Arg Ser Pro | | | |
| 50 | 55 | 60 | |
| Ser Ala Gly Ile Leu Arg Thr Pro Ile Gln Val Glu Ser Ser Pro Gln | | | |
| 65 | 70 | 75 | 80 |

Pro Gly Leu Pro Ala Gly Glu Gln Leu Glu Gly Leu Lys His Ala Gln
 85 90 95
 Asp Ser Asp Pro Arg Ser Pro Leu Gly Lys Asn Xaa Gly His Gly Trp
 100 105 110
 Gln Val Gly Gln Gly Ser Asp Leu Gly Ser Pro Gln Pro Leu Pro Pro
 115 120 125
 Ser Ala Ser His Leu Tyr Ser Ser Arg Ala Ser Arg Cys Ser Gln Pro
 130 135 140
 Pro Cys Leu Ser Leu Pro Trp Phe Gly Val Arg Ser Ser Pro Ala Asn
 145 150 155 160
 Thr Tyr His Val Pro Val Thr Ser Leu Cys Pro Ser Pro Ala Leu His
 165 170 175
 Tyr Thr Ala Leu Gln Ala Gly Ile Ile Ser Thr Ser Gln Ala Arg Ala
 180 185 190
 Pro Arg
 194

<210> 1365
<211> 114
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(114)
<223> X = any amino acid or stop code

<400> 1365
 Pro Leu Leu Pro Arg Phe Ile Asp Ile Pro Cys Leu Leu Cys Tyr
 1 5 10 15
 Leu Thr Gln Val Thr Pro Asp Asp Met Tyr Ala Lys Ala Phe Leu Ile
 20 25 30
 Lys Pro Asn Thr Ala Ile Thr Gly Thr Asp Arg Arg Lys Leu Arg Ala
 35 40 45
 Asp Glu Thr Thr Asp Pro Phe Leu Gly Thr Asp Gln Ile Tyr Glu
 50 55 60
 Leu Leu Pro Gly Lys Asp Glu Leu Asn Ile Val Lys Ser Asn Ala His
 65 70 75 80
 Lys Arg Asp Ala Xaa Thr Ala Tyr Val Ser Gly Glu Asn His Ile Leu
 85 90 95
 Ser Glu Pro Xaa Lys Asn Leu Tyr Pro Ala Val Asn Thr Leu Ser Ser
 100 105 110
 Tyr Pro
 114

<210> 1366
<211> 80
<212>Amino acid
<213> Homo sapiens

<400> 1366
 Ser Arg Gln Pro Pro Pro Leu Leu Thr Met Val Phe Leu Leu Glu Phe
 1 5 10 15
 Leu Phe Leu Val Phe Phe Pro Gly Cys Val Asn Gln Leu Leu Leu Ser

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Tyr | Pro | Trp | Gln | Gly | Gln | Gly | Thr | Ser | Leu | Trp | Ser | Ser | Leu | Ser | Phe |
| 20 | | | | | | | 25 | | | | | | | 30 | |
| | | 35 | | | | | 40 | | | | | | | 45 | |
| His | Trp | Leu | Leu | Pro | Gln | Glu | Asp | Ser | Ser | Arg | Leu | Ser | Ile | Phe | Pro |
| | | 50 | | | | | 55 | | | | | | | 60 | |
| Leu | Arg | Ala | Gly | Ser | Pro | Pro | Gln | Pro | Ala | Gln | Ala | Pro | Gln | Arg | Ile |
| | | 65 | | | | | 70 | | | | | | | 75 | |
| | | | | | | | | | | | | | | | 80 |

<210> 1367
<211> 301
<212>Amino acid
<213> Homo sapiens

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Ser | Arg | Glu | Gln | Ser | Ser | Leu | Phe | Ala | Ala | Asp | Ala | Glu | Arg | Ser |
| 1 | | | | | | | 5 | | | | 10 | | | 15 | |
| Trp | Gly | Gly | Lys | Ser | Cys | Cys | Leu | Leu | Arg | Trp | Arg | Phe | Val | Gly | Lys |
| | | | | | | | 20 | | | | 25 | | | 30 | |
| Ala | Ser | His | Phe | Pro | Arg | Leu | Leu | Pro | Leu | Pro | Gly | Glu | Glu | Arg | Pro |
| | | | | | | | 35 | | | | 40 | | | 45 | |
| Glu | Thr | Lys | Glu | Arg | Ala | Trp | Lys | Met | Glu | Gln | Thr | Trp | Thr | Arg | Asp |
| | | | | | | | 50 | | | | 55 | | | 60 | |
| Tyr | Phe | Ala | Glu | Asp | Asp | Gly | Glu | Met | Val | Pro | Arg | Thr | Ser | His | Thr |
| | | | | | | | 65 | | | | 70 | | | 75 | |
| Ala | Ala | Ser | Val | Ser | Leu | Thr | Ala | Phe | Ieu | Ser | Asp | Thr | Lys | Asp | Arg |
| | | | | | | | 85 | | | | 90 | | | 95 | |
| Gly | Pro | Pro | Val | Gln | Ser | Gln | Ile | Trp | Arg | Ser | Gly | Glu | Lys | Val | Pro |
| | | | | 100 | | | 105 | | | | | | | 110 | |
| Phe | Val | Gln | Thr | Tyr | Ser | Leu | Arg | Ala | Phe | Glu | Lys | Pro | Pro | Gln | Val |
| | | | | 115 | | | 120 | | | | | | | 125 | |
| Gln | Thr | Gln | Ala | Leu | Arg | Asp | Phe | Glu | Lys | His | Leu | Asn | Asp | Leu | Lys |
| | | | | 130 | | | 135 | | | | | | | 140 | |
| Lys | Glu | Asn | Phe | Ser | Leu | Lys | Leu | Leu | Ile | Tyr | Phe | Leu | Glu | Glu | Arg |
| | | | | 145 | | | 150 | | | | | | | 155 | |
| Met | Gln | Gln | Lys | Tyr | Glu | Ala | Ser | Arg | Glu | Asp | Ile | Tyr | Lys | Arg | Asn |
| | | | | 165 | | | 170 | | | | | | | 175 | |
| Thr | Glu | Leu | Lys | Val | Glu | Val | Glu | Ser | Leu | Lys | Arg | Glu | Leu | Gln | Asp |
| | | | | 180 | | | 185 | | | | | | | 190 | |
| Lys | Lys | Gln | His | Leu | Asp | Lys | Thr | Trp | Ala | Asp | Val | Glu | Asn | Leu | Asn |
| | | | | 195 | | | 200 | | | | | | | 205 | |
| Ser | Gln | Asn | Glu | Ala | Glu | Leu | Arg | Arg | Gln | Phe | Glu | Glu | Arg | Gln | Gln |
| | | | | 210 | | | 215 | | | | | | | 220 | |
| Glu | Met | Glu | His | Val | Tyr | Glu | Leu | Leu | Asn | Lys | Met | Gln | Leu | Leu | |
| | | | | 225 | | | 230 | | | | | | | 235 | |
| Gln | Glu | Glu | Ser | Arg | Leu | Ala | Lys | Asn | Glu | Ala | Ala | Arg | Met | Ala | Ala |
| | | | | 245 | | | 245 | | | | | | | 250 | |
| Leu | Val | Glu | Ala | Glu | Lys | Glu | Cys | Asn | Leu | Glu | Leu | Ser | Glu | Lys | Leu |
| | | | | 260 | | | 265 | | | | | | | 270 | |
| Lys | Gly | Val | Thr | Lys | Asn | Trp | Glu | Asp | Val | Pro | Gly | Asp | Gln | Val | Lys |
| | | | | 275 | | | 280 | | | | | | | 285 | |
| Pro | Asp | Gln | Tyr | Thr | Glu | Ala | Leu | Ala | Gln | Arg | Asp | Lys | | | |
| | | | | 290 | | | 295 | | | | | | | 300 | 301 |

<210> 1368
<211> 308
<212>Amino acid

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(308)

<223> X = any amino acid or stop code

<400> 1368

| | | | | | | | | | | | | | | | |
|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Thr | Arg | Arg | Arg | Gly | Thr | Thr | Trp | Arg | Ser | Pro | Arg | Pro | Arg | Arg | Ala |
| 1 | | | | | 5 | | | | 10 | | | | 15 | | |
| Ser | Thr | Ser | Arg | Pro | Ser | Thr | Arg | Pro | Arg | Gly | Val | Ala | Ser | Trp | Pro |
| | | | | | 20 | | | | 25 | | | | 30 | | |
| Trp | Glu | Thr | Ala | Gly | Thr | Ala | Thr | Thr | Gly | Pro | Gly | Pro | Ser | Ala | Arg |
| | 35 | | | | | 40 | | | | 45 | | | | | |
| Thr | Arg | Arg | Arg | Ala | Ala | Arg | Arg | Arg | Arg | Ser | Arg | Pro | Arg | Arg | Arg |
| | 50 | | | | | 55 | | | | 60 | | | | | |
| Ala | His | Gly | Gly | Leu | Ser | Gln | Pro | Ala | Gly | Trp | Gln | Ser | Leu | Leu | Ser |
| | 65 | | | | | 70 | | | | 75 | | | | 80 | |
| Phe | Thr | Ile | Leu | Phe | Leu | Ala | Trp | Leu | Ala | Gly | Phe | Ser | Ser | Arg | Leu |
| | | | | | 85 | | | | 90 | | | | 95 | | |
| Phe | Ala | Val | Ile | Arg | Phe | Glu | Ser | Ile | Ile | His | Glu | Phe | Asp | Pro | Trp |
| | | 100 | | | | 105 | | | | 110 | | | | | |
| Phe | Asn | Tyr | Arg | Ser | Thr | His | His | Leu | Ala | Ser | His | Gly | Phe | Tyr | Glu |
| | 115 | | | | | 120 | | | | 125 | | | | | |
| Phe | Leu | Asn | Trp | Phe | Asp | Glu | Arg | Ala | Trp | Tyr | Pro | Leu | Gly | Arg | Ile |
| | 130 | | | | | 135 | | | | 140 | | | | | |
| Val | Gly | Gly | Thr | Val | Tyr | Pro | Gly | Leu | Met | Ile | Thr | Ala | Gly | Leu | Ile |
| | 145 | | | | | 150 | | | | 155 | | | | 160 | |
| His | Trp | Ile | Leu | Asn | Thr | Leu | Asn | Ile | Thr | Val | His | Ile | Arg | Asp | Val |
| | | 165 | | | | | 170 | | | | 175 | | | | |
| Cys | Val | Phe | Leu | Ala | Pro | Thr | Phe | Ser | Gly | Leu | Thr | Ser | Ile | Ser | Thr |
| | 180 | | | | | 185 | | | | 190 | | | | | |
| Phe | Leu | Leu | Thr | Arg | Glu | Leu | Trp | Asn | Gln | Gly | Ala | Gly | Leu | Leu | Ala |
| | 195 | | | | | 200 | | | | 205 | | | | | |
| Ala | Cys | Phe | Ile | Ala | Ile | Val | Pro | Gly | Tyr | Ile | Ser | Arg | Ser | Val | Ala |
| | 210 | | | | | 215 | | | | 220 | | | | | |
| Gly | Ser | Phe | Asp | Asn | Glu | Gly | Ile | Ala | Ile | Phe | Ala | Leu | Gln | Phe | Thr |
| | 225 | | | | | 230 | | | | 235 | | | | 240 | |
| Tyr | Tyr | Leu | Trp | Val | Lys | Ser | Val | Lys | Thr | Gly | Ser | Val | Phe | Trp | Thr |
| | | 245 | | | | | 250 | | | 255 | | | | | |
| Met | Cys | Cys | Cys | Leu | Ser | Tyr | Phe | Tyr | Met | Val | Ser | Ala | Trp | Gly | Gly |
| | 260 | | | | | 265 | | | | 270 | | | | | |
| Tyr | Val | Phe | Ile | Ile | Asn | Leu | Ile | Pro | Leu | His | Ala | Phe | Val | Leu | Val |
| | 275 | | | | | 280 | | | | 285 | | | | | |
| Leu | Met | Gln | Arg | Tyr | Ser | Lys | Arg | Val | Tyr | Ile | Xaa | Tyr | Ser | Thr | Phe |
| | 290 | | | | | 295 | | | | 300 | | | | | |
| Tyr | Ile | .Val | Gly | | | | | | | | | | | | |
| | 305 | | | | | 308 | | | | | | | | | |

<210> 1369

<211> 212

<212>Amino acid

<213> Homo sapiens

<400> 1369

Arg Arg Leu Ile Val Val Leu Ser Asp Ala Phe Leu Ser Arg Ala Trp
 1 5 10 15
 Cys Ser His Ser Phe Arg Val Gly Pro Ala Arg Gly Trp Val Gly Pro
 20 25 30
 Ser Val Ala Pro Thr Pro Leu Thr Val Pro Pro Arg Arg Glu Gly Leu
 35 40 45
 Cys Arg Leu Leu Glu Leu Thr Arg Arg Pro Ile Phe Ile Thr Phe Glu
 50 55 60
 Gly Gln Arg Arg Asp Pro Ala His Pro Ala Leu Arg Leu Leu Arg Gln
 65 70 75 80
 His Arg His Leu Val Thr Leu Leu Leu Trp Arg Pro Gly Ser Val Thr
 85 90 95
 Pro Ser Ser Asp Phe Trp Lys Glu Val Gln Leu Ala Leu Pro Arg Lys
 100 105 110
 Val Arg Tyr Arg Pro Val Glu Gly Asp Pro Gln Thr Gln Leu Gln Asp
 115 120 125
 Asp Lys Asp Pro Met Leu Ile Leu Arg Gly Arg Val Pro Glu Gly Arg
 130 135 140
 Ala Leu Asp Ser Glu Val Asp Pro Asp Pro Glu Gly Asp Leu Gly Val
 145 150 155 160
 Arg Gly Pro Val Phe Gly Glu Pro Ser Ala Pro Pro His Thr Ser Gly
 165 170 175
 Val Ser Leu Gly Glu Ser Arg Ser Ser Glu Val Asp Val Ser Asp Leu
 180 185 190
 Gly Ser Arg Asn Tyr Ser Ala Arg Thr Asp Phe Tyr Cys Leu Val Ser
 195 200 205
 Lys Asp Asp Met
 210 212

<210> 1370
 <211> 281
 <212>Amino acid
 <213> Homo sapiens

<400> 1370
 Leu Ser His Glu Gly Trp Arg Arg Gly Arg Glu Gly Glu Arg Ile Asn
 1 5 10 15
 Ser Ser Val Ala Ser Leu Ala Pro Leu Cys Ile Leu Pro Asp Leu Pro
 20 25 30
 Ser Asn Met His Leu Ala Arg Leu Val Gly Ser Cys Ser Leu Leu Leu
 35 40 45
 Leu Leu Gly Ala Leu Ser Gly Trp Ala Ala Ser Asp Asp Pro Ile Glu
 50 55 60
 Lys Val Ile Glu Gly Ile Asn Arg Gly Leu Ser Asn Ala Glu Arg Glu
 65 70 75 80
 Val Gly Lys Ala Leu Asp Gly Ile Asn Ser Gly Ile Thr His Ala Gly
 85 90 95
 Arg Glu Val Glu Lys Val Phe Asn Gly Leu Ser Asn Met Gly Ser His
 100 105 110
 Thr Gly Lys Glu Leu Asp Lys Gly Val Gln Gly Leu Asn His Gly Met
 115 120 125
 Asp Lys Val Ala His Glu Ile Asn His Gly Ile Gly Gln Ala Gly Lys
 130 135 140
 Glu Ala Glu Lys Leu Gly His Gly Val Asn Asn Ala Ala Gly Gln Ala
 145 150 155 160
 Gly Lys Glu Ala Asp Lys Ala Val Gln Gly Phe His Thr Gly Val His
 165 170 175
 Gln Ala Gly Lys Glu Ala Glu Lys Leu Gly Gln Gly Val Asn His Ala
 180 185 190

Ala Asp Gln Ala Gly Lys Glu Val Glu Lys Leu Gly Gln Gly Ala His
 195 200 205
 His Ala Ala Gly Gln Ala Gly Lys Glu Leu Gln Asn Ala His Asn Gly
 210 215 220
 Val Asn Gln Ala Ser Lys Glu Ala Asn Gln Leu Leu Asn Gly Asn His
 225 230 235 240
 Gln Ser Gly Ser Ser His Gln Gly Gly Ala Thr Thr Thr Pro Leu
 245 250 255
 Ala Ser Gly Ala Ser Val Asn Thr Pro Phe Ile Asn Leu Pro Ala Leu
 260 265 270
 Trp Arg Ser Val Ala Asn Ile Met Pro
 275 280 281

<210> 1371
 <211> 119
 <212>Amino acid
 <213> Homo sapiens

<400> 1371
 Ser Ala Ser Gly Gly Leu Gly Met Thr Val Glu Gly Pro Glu Gly Ser
 1 5 10 15
 Glu Arg Glu His Arg Pro Pro Glu Lys Pro Pro Arg Pro Pro Arg Pro
 20 25 30
 Leu His Leu Ser Asp Arg Ser Phe Arg Arg Lys Lys Asp Ser Val Glu
 35 40 45
 Ser His Pro Thr Trp Val Asp Asp Thr Arg Ile Asp Ala Asp Ala Ile
 50 55 60
 Val Glu Lys Ile Val Gln Ser Gln Asp Phe Thr Asp Gly Ser Asn Thr
 65 70 75 80
 Glu Asp Ser Asn Leu Arg Leu Phe Val Ser Arg Asp Gly Ser Ala Thr
 85 90 95
 Leu Ser Gly Ile Gln Leu Ala Thr Arg Val Ser Ser Gly Val Tyr Glu
 100 105 110
 Pro Val Val Ile Glu Ser His
 115 119

<210> 1372
 <211> 108
 <212>Amino acid
 <213> Homo sapiens

<400> 1372
 Glu Arg Ser Gly Trp Pro Gln Pro Glu Gly Thr Val Thr Ala Gln Gly
 1 5 10 15
 Pro Leu Phe Trp Glu Arg Leu Ser Gln Ala Val Thr Val Ser Ser Gly
 20 25 30
 Tyr Lys Ala Asp Met Trp Pro Ser Phe Pro Gln Val Arg Val Gly Ser
 35 40 45
 Phe Leu Phe Gly Ile Leu Phe Phe Ser Phe Gly Ser Ser Ser Leu Pro
 50 55 60
 Pro Gly Leu Pro Pro Pro Ala Ser Leu Leu Cys Cys Ala Val Gln Trp
 65 70 75 80
 Gly Ala Arg Ala Leu Phe Leu Pro Cys Leu Lys Glu Arg Ala Leu Gly
 85 90 95

Met Glu Met Arg Asn Asn Thr Leu Ser Phe Arg Gln
 100 105 108

<210> 1373
<211> 209
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(209)
<223> X = any amino acid or stop code

<400> 1373
Ser Ser Ser Asn Leu Arg Leu Ser Phe Leu Ile Asn Glu Asn Ile Leu
1 5 10 15
Gly Lys Cys Phe Arg Ser Gly Pro Ser Cys Ala Gly Pro Arg Ile Ser
20 25 30
Pro Leu Ala Ala Gln Tyr Glu Cys Pro Arg Pro Ser Leu Leu Ile Met
35 40 45
Ala Ser Val Pro Lys Thr Asn Lys Ile Glu Pro Arg Ser Tyr Ser Ile
50 55 60
Ile Pro Ser Cys Gly Ile Arg Arg Leu Gly Pro Ala Leu Asn Thr Leu
65 70 75 80
Ile Phe Gln Ser Lys Arg Phe Gly Pro Arg Gly His Ser Ala Lys Ser
85 90 95
Ile Glu Gly Ala Pro Arg Gly Lys Gly Arg Gly Arg Ala Val Ala Arg
100 105 110
Leu Ala Ala Asp Arg Pro Pro Ala Pro Lys Ile Gln Leu Arg Ala Phe
115 120 125
Xaa Leu Gln Gln Leu Xaa Tyr Thr Leu Leu Glu Leu Glu Leu Pro Arg
130 135 140
Leu Leu Ala Pro Asp Leu Pro Ser Asn Gly Ser Ser Leu Lys Asp Leu
145 150 155 160
Lys Trp Thr His Ser Asn Tyr Arg Ala Ser Lys Glu Ser Cys Ile Val
165 170 175
Ile Phe Val Thr Thr Ser Pro Gly Arg Glu Trp Val Ile Cys Ala Leu
180 185 190
Ala Ala Phe Leu Gly Cys Gly Ser Leu Ser Gln Ala Pro Ser Pro Glu
195 200 205
Ser
209

<210> 1374
<211> 153
<212>Amino acid
<213> Homo sapiens

<400> 1374
Leu Arg Ile Ile Asn Thr Tyr Phe Cys Phe Lys Phe Leu Ile Val Asn
1 5 10 15
Tyr Ile His Gly Thr Thr Lys Ala Arg Lys Pro His Val Leu Gly Glu
20 25 30
Ser Leu Ile Ser Ala Met Ser Arg Gln Glu Pro Lys Met Phe Val Leu

| | | |
|---|-----|-----|
| 35 | 40 | 45 |
| Leu Tyr Val Thr Ser Phe Ala Ile Cys Ala Ser Gly Gln Pro Arg Gly | | |
| 50 | 55 | 60 |
| Asn Gln Leu Lys Gly Glu Asn Tyr Ser Pro Arg Tyr Ile Cys Ser Ile | | |
| 65 | 70 | 75 |
| Pro Gly Leu Pro Pro Gly Pro Pro Gly Ala Asn Gly Ser Pro | | |
| 85 | 90 | 95 |
| Gly Pro His Gly Arg Ile Gly Leu Pro Gly Arg Asp Gly Arg Asp Gly | | |
| 100 | 105 | 110 |
| Arg Lys Gly Glu Lys Gly Glu Lys Gly Thr Ala Gly Leu Arg Gly Lys | | |
| 115 | 120 | 125 |
| Thr Gly Pro Leu Gly Leu Ala Gly Glu Lys Gly Asp Gln Gly Glu Thr | | |
| 130 | 135 | 140 |
| Gly Lys Lys Gly Pro Ile Gly Pro Glu | | |
| 145 | 150 | 153 |

<210> 1375
 <211> 419
 <212>Amino acid
 <213> Homo sapiens

| | | | |
|---|-----|-----|----|
| <400> 1375 | | | |
| Phe Ala Ser Ala Met Leu Gly Ser Arg Val Asp Arg Pro Lys Leu Ser | | | |
| 1 | 5 | 10 | 15 |
| Val Ala Pro Ser Val Val Leu Glu Glu Asp Gln Val Leu Val Ser Pro | | | |
| 20 | 25 | 30 | |
| Ala Val Asp Leu Glu Ala Gly Cys Arg Leu Arg Asp Phe Thr Glu Lys | | | |
| 35 | 40 | 45 | |
| Ile Met Asn Val Lys Gly Lys Val Ile Leu Ser Met Leu Val Val Ser | | | |
| 50 | 55 | 60 | |
| Thr Val Ile Ile Val Phe Trp Glu Phe Ile Asn Ser Thr Glu Gly Ser | | | |
| 65 | 70 | 75 | 80 |
| Phe Leu Trp Ile Tyr His Ser Lys Asn Pro Glu Val Asp Asp Ser Ser | | | |
| 85 | 90 | 95 | |
| Ala Gln Lys Gly Trp Trp Phe Leu Ser Trp Phe Asn Asn Gly Ile His | | | |
| 100 | 105 | 110 | |
| Asn Tyr Gln Gln Gly Glu Glu Asp Ile Asp Lys Glu Lys Gly Arg Glu | | | |
| 115 | 120 | 125 | |
| Glu Thr Lys Gly Arg Lys Met Thr Gln Gln Ser Phe Gly Tyr Gly Thr | | | |
| 130 | 135 | 140 | |
| Gly Leu Ile Gln Thr | | | |
| 145 | 149 | | |

<210> 1376
 <211> 416
 <212>Amino acid
 <213> Homo sapiens

| | | | |
|---|----|----|----|
| <400> 1376 | | | |
| Gly Ser His Arg Phe Ser Leu Ala Ser Pro Leu Asp Pro Glu Val Gly | | | |
| 1 | 5 | 10 | 15 |
| Pro Tyr Cys Asp Thr Pro Thr Met Arg Thr Leu Phe Asn Leu Leu Trp | | | |
| 20 | 25 | 30 | |
| Leu Ala Leu Ala Cys Ser Pro Val His Thr Thr Leu Ser Lys Ser Asp | | | |

| | | |
|---|-----|---------|
| 35 | 40 | 45 |
| Ala Lys Lys Ala Ala Ser Lys Thr Leu Leu Glu Lys Ser Gln Phe Ser | | |
| 50 | 55 | 60 |
| Asp Lys Pro Val Gln Asp Arg Gly Leu Val Val Thr Asp Leu Lys Ala | | |
| 65 | 70 | 75 |
| Glu Ser Val Val Leu Glu His Arg Ser Tyr Cys Ser Ala Lys Ala Arg | | 80 |
| 85 | 90 | 95 |
| Asp Arg His Phe Ala Gly Asp Val Leu Gly Tyr Val Thr Pro Trp Asn | | |
| 100 | 105 | 110 |
| Ser His Gly Tyr Asp Val Thr Lys Val Phe Gly Ser Lys Phe Thr Gln | | |
| 115 | 120 | 125 |
| Ile Ser Pro Val Trp Leu Gln Leu Lys Arg Arg Gly Arg Glu Met Phe | | |
| 130 | 135 | 140 |
| Glu Val Thr Gly Leu His Asp Val Asp Gln Gly Trp Met Arg Ala Val | | |
| 145 | 150 | 155 |
| Arg Lys His Ala Lys Gly Leu His Ile Val Pro Arg Leu Leu Phe Glu | | 160 |
| 165 | 170 | 175 |
| Asp Trp Thr Tyr Asp Asp Phe Arg Asn Val Leu Asp Ser Glu Asp Glu | | |
| 180 | 185 | 190 |
| Ile Glu Glu Ile Ser Lys Thr Val Val Gln Val Ala Lys Asn Gln His | | |
| 195 | 200 | 205 |
| Phe Asp Gly Phe Val Val Glu Val Trp Asn Gln Leu Leu Ser Gln Lys | | |
| 210 | 215 | 220 |
| Arg Val Gly Leu Ile His Met Leu Thr His Leu Ala Glu Ala Leu His | | |
| 225 | 230 | 235 |
| Gln Ala Arg Leu Leu Ala Leu Leu Val Ile Pro Pro Ala Ile Thr Pro | | 240 |
| 245 | 250 | 255 |
| Gly Thr Asp Gln Leu Gly Met Phe Thr His Lys Glu Phe Glu Gln Leu | | |
| 260 | 265 | 270 |
| Ala Pro Val Leu Asp Gly Phe Ser Leu Met Thr Tyr Asp Tyr Ser Thr | | |
| 275 | 280 | 285 |
| Ala His Gln Pro Gly Pro Asn Ala Pro Leu Ser Trp Val Arg Ala Cys | | |
| 290 | 295 | 300 |
| Val Gln Val Leu Asp Pro Lys Ser Lys Trp Arg Ser Lys Ile Leu Leu | | |
| 305 | 310 | 315 |
| Gly Leu Asn Phe Tyr Gly Met Asp Tyr Ala Thr Ser Lys Asp Ala Arg | | |
| 325 | 330 | 335 |
| Glu Pro Val Val Gly Ala Arg Tyr Ile Gln Thr Leu Lys Asp His Arg | | |
| 340 | 345 | 350 |
| Pro Arg Met Val Trp Asp Ser Gln Val Ser Glu His Phe Phe Glu Tyr | | |
| 355 | 360 | 365 |
| Lys Lys Ser Arg Ser Gly Arg His Val Val Phe Tyr Pro Thr Leu Lys | | |
| 370 | 375 | 380 |
| Ser Leu Gln Val Arg Leu Glu Leu Ala Arg Glu Leu Gly Val Gly Val | | |
| 385 | 390 | 395 |
| Ser Ile Trp Glu Leu Gly Gln Gly Leu Asp Tyr Phe Tyr Asp Leu Leu | | 400 |
| 405 | 410 | 415 416 |

<210> 1377
 <211> 316
 <212>Amino acid
 <213> Homo sapiens

<400> 1377
 Gly Arg Glu Gly Thr Gly Trp Gly Pro Ala Met Ser Glu Val Thr Arg
 1 5 10 15
 Ser Leu Leu Gln Arg Trp Gly Ala Ser Phe Arg Arg Gly Ala Asp Phe

| | | | |
|---|-----|-----|-----|
| | 20 | 25 | 30 |
| Asp Ser Trp Gly Gln Leu Val Glu Ala Ile Asp Glu Tyr Gln Ile Leu | | | |
| 35 | 40 | 45 | |
| Ala Arg His Leu Gln Lys Glu Ala Gln Ala Gln His Asn Asn Ser Glu | | | |
| 50 | 55 | 60 | |
| Phe Thr Glu Glu Gln Lys Glu Thr Ile Gly Lys Ile Ala Thr Cys Leu | | | |
| 65 | 70 | 75 | 80 |
| Glu Leu Arg Ser Ala Ala Leu Gln Ser Thr Gln Ser Gln Glu Glu Phe | | | |
| 85 | 90 | 95 | |
| Lys Leu Glu Asp Leu Lys Lys Leu Glu Pro Ile Leu Lys Asn Ile Leu | | | |
| 100 | 105 | 110 | |
| Thr Tyr Asn Lys Glu Phe Pro Phe Asp Val Gln Pro Val Pro Leu Arg | | | |
| 115 | 120 | 125 | |
| Arg Ile Leu Ala Pro Gly Glu Glu Glu Asn Leu Glu Phe Glu Glu Asp | | | |
| 130 | 135 | 140 | |
| Glu Glu Glu Gly Gly Ala Gly Ala Gly Ser Pro Asp Ser Phe Pro Ala | | | |
| 145 | 150 | 155 | 160 |
| Arg Val Pro Gly Thr Leu Leu Pro Arg Leu Pro Ser Glu Pro Gly Met | | | |
| 165 | 170 | 175 | |
| Thr Leu Leu Thr Ile Arg Ile Glu Lys Ile Gly Leu Lys Asp Ala Gly | | | |
| 180 | 185 | 190 | |
| Gln Cys Ile Asn Pro Tyr Ile Thr Val Ser Val Lys Asp Leu Asn Gly | | | |
| 195 | 200 | 205 | |
| Ile Asp Leu Thr Pro Val Gln Asp Thr Pro Val Ala Ser Arg Lys Glu | | | |
| 210 | 215 | 220 | |
| Asp Thr Tyr Val His Phe Asn Val Asp Ile Glu Leu Gln Lys His Val | | | |
| 225 | 230 | 235 | 240 |
| Glu Lys Leu Thr Lys Gly Ala Ala Ile Phe Phe Glu Phe Lys His Tyr | | | |
| 245 | 250 | 255 | |
| Lys Pro Lys Lys Arg Phe Thr Ser Thr Lys Cys Phe Ala Phe Met Glu | | | |
| 260 | 265 | 270 | |
| Met Asp Glu Ile Lys Leu Gly Pro Ile Val Ile Glu Leu Tyr Lys Lys | | | |
| 275 | 280 | 285 | |
| Pro Thr Asp Phe Lys Arg Lys Gln Leu Gln Leu Leu Thr Lys Lys Pro | | | |
| 290 | 295 | 300 | |
| Leu Tyr Leu His Leu His Gln Thr Leu His Lys Glu | | | |
| 305 | 310 | 315 | 316 |

<210> 1378
 <211> 90
 <212>Amino acid
 <213> Homo sapiens

| | | | |
|--|------------|----|----|
| | <400> 1378 | | |
| Gly Ser Ile Thr Ser Glu Pro Ser Leu Asp Ser Leu Gln Pro Leu Pro | | | |
| 1 | 5 | 10 | 15 |
| Pro Gly Phe Lys Arg Phe Ser Cys Leu Ser Leu Pro Ser Ser Trp Asp | | | |
| 20 | 25 | 30 | |
| Tyr Arg Arg Pro Pro Pro Gly Leu Ala Tyr Phe Cys Ile Phe Ser Arg | | | |
| 35 | 40 | 45 | |
| Asp Glu Val Ser Pro Cys Trp Pro Gly Cys Ser Pro Ser Pro Asp Leu. | | | |
| 50 | 55 | 60 | |
| Met Ile Arg Leu Pro Arg Pro Pro Ser Val Gly Ile Thr Gly Val Ser | | | |
| 65 | 70 | 75 | 80 |
| His Arg Ala Trp Pro Thr Ile Asp Asn Phe | | | |
| 85 | 90 | | |

<210> 1379

<211> 332
<212>Amino acid
<213> Homo sapiens

<400> 1379
Lys Met Pro Val Pro Trp Phe Leu Leu Ser Leu Ala Leu Gly Arg Ser
1 5 10 15
Pro Val Val Leu Ser Leu Glu Arg Leu Val Gly Pro Gln Asp Ala Thr
20 25 30
His Cys Ser Pro Gly Leu Ser Cys Arg Leu Trp Asp Ser Asp Ile Leu
35 40 45
Cys Leu Pro Gly Asp Ile Val Pro Ala Pro Gly Pro Val Leu Ala Pro
50 55 60
Thr His Leu Gln Thr Glu Leu Val Leu Arg Cys Gln Lys Glu Thr Asp
65 70 75 80
Cys Asp. Leu Cys Leu Arg Val Ala Val His Leu Ala Val His Gly His
85 90 95
Trp Glu Glu Pro Glu Asp Glu Glu Lys Phe Gly Gly Ala Ala Asp Ser
100 105 110
Gly Val Glu Glu Pro Arg Asn Ala Ser Leu Gln Ala Gln Val Val Leu
115 120 125
Ser Phe Gln Ala Tyr Pro Thr Ala Arg Cys Val Leu Leu Glu Val Gln
130 135 140
Val Pro Ala Ala Leu Val Gln Phe Gly Gln Ser Val Gly Ser Val Val
145 150 155 160
Tyr Asp Cys Phe Glu Ala Ala Leu Gly Ser Glu Val Arg Ile Trp Ser
165 170 175
Tyr Thr Gln Pro Arg Tyr Glu Lys Glu Leu Asn His Thr Gln Gln Leu
180 185 190
Pro Asp Cys Arg Gly Leu Glu Val Trp Asn Ser Ile Pro Ser Cys Trp
195 200 205
Ala Leu Pro Trp Leu Asn Val Ser Ala Asp Gly Asp Asn Val His Leu
210 215 220
Val Leu Asn Val Ser Glu Glu Gln His Phe Gly Leu Ser Leu Tyr Trp
225 230 235 240
Asn Gln Val Gln Gly Pro Pro Lys Pro Arg Trp His Lys Asn Leu Val
245 250 255
Arg Pro Pro Pro Ser Gln Val His Ser His Cys Arg Pro Cys Leu Cys
260 265 270
Lys Asp Ala Val Pro Tyr Gln Arg Gly Ser Leu Lys Arg Thr His Pro
275 280 285
Lys Gln Gly Lys Ile Gly Gly Gly Thr Ser Ala Phe Leu Val Ser Leu
290 295 300
Thr Leu Ala Ser Ser Ser Ser Leu Ser Ser Pro Thr Ser Phe Leu
305 310 315 320
Tyr Leu Phe His Arg Leu Asp Arg Arg Ser Leu Pro
325 330 332

<210> 1380
<211> 117
<212>Amino acid
<213> Homo sapiens

<400> 1380
Leu Arg Leu Trp Asn Arg Asn Gln Met Met His Asn Ile Ile Val Lys

| | | | |
|---|-----|-----|----|
| 1 | 5 | 10 | 15 |
| Glu Leu Ile Val Thr Phe Phe Leu Gly Ile Thr Val Val Gln Met Leu | | | |
| 20 | 25 | 30 | |
| Ile Ser Val Thr Gly Leu Lys Gly Val Ala Gln Asn Gly Ser Glu | | | |
| 35 | 40 | 45 | |
| Ser Glu Val Phe Val Gly Lys Tyr Glu Thr Leu Val Phe Tyr Trp Pro | | | |
| 50 | 55 | 60 | |
| Ser Leu Leu Cys Leu Ala Phe Leu Leu Gly Arg Phe Leu His Met Phe | | | |
| 65 | 70 | 75 | 80 |
| Val Lys Ala Leu Arg Val His Leu Gly Trp Glu Leu Gln Val Glu Glu | | | |
| 85 | 90 | 95 | |
| Lys Ser Val Leu Glu Val His Gln Gly Glu His Val Lys Gln Leu Leu | | | |
| 100 | 105 | 110 | |
| Arg Ile Pro Arg Pro | | | |
| 115 | 117 | | |

<210> 1381
<211> 216
<212>Amino acid
<213> Homo sapiens

| | | | |
|---|-----|-----|-----|
| <400> 1381 | | | |
| Lys Val Asn Arg Lys Leu Arg Lys Lys Gly Lys Ile Ser His Asp Lys | | | |
| 1 | 5 | 10 | 15 |
| Arg Lys Ser Arg Ser Lys Ala Ile Gly Ser Asp Thr Ser Asp Ile | | | |
| 20 | 25 | 30 | |
| Val His Ile Trp Cys Pro Glu Gly Met Lys Thr Ser Asp Ile Lys Glu | | | |
| 35 | 40 | 45 | |
| Leu Asn Ile Val Leu Pro Glu Phe Glu Lys Thr His Leu Glu His Gln | | | |
| 50 | 55 | 60 | |
| Gln Arg Ile Glu Ser Lys Val Cys Lys Ala Ala Ile Ala Thr Phe Tyr | | | |
| 65 | 70 | 75 | 80 |
| Val Asn Val Lys Glu Gln Phe Ile Lys Met Leu Lys Glu Ser Gln Met | | | |
| 85 | 90 | 95 | |
| Leu Thr Asn Leu Lys Arg Lys Asn Ala Lys Met Ile Ser Asp Ile Glu | | | |
| 100 | 105 | 110 | |
| Lys Lys Arg Gln Arg Met Ile Glu Val Gln Asp Glu Leu Arg Leu | | | |
| 115 | 120 | 125 | |
| Glu Pro Gln Leu Lys Gln Leu Gln Thr Lys Tyr Asp Glu Leu Lys Glu | | | |
| 130 | 135 | 140 | |
| Arg Lys Ser Ser Leu Arg Asn Ala Ala Tyr Phe Leu Ser Asn Leu Lys | | | |
| 145 | 150 | 155 | 160 |
| Gln Leu Tyr Gln Asp Tyr Ser Asp Val Gln Ala Gln Glu Pro Asn Val | | | |
| 165 | 170 | 175 | |
| Lys Glu Thr Tyr Asp Ser Ser Leu Pro Ala Leu Leu Phe Lys Ala | | | |
| 180 | 185 | 190 | |
| Arg Thr Leu Leu Gly Ala Glu Ser His Leu Arg Asn Ile Asn His Gln | | | |
| 195 | 200 | 205 | |
| Leu Glu Lys Leu Leu Asp Gln Gly | | | |
| 210 | 215 | 216 | |

<210> 1382
<211> 137
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature

<222> (1) . . . (137)
 <223> X = any amino acid or stop code

<400> 1382
 Val Trp Val Ala Met Glu Glu Pro Pro Val Arg Glu Glu Xaa Glu
 1 5 10 15
 Glu Gly Glu Glu Asp Glu Glu Arg Asp Glu Val Gly Pro Glu Gly Ala
 20 25 30
 Leu Gly Lys Ser Pro Phe Gln Leu Thr Ala Glu Asp Val Tyr Asp Ile
 35 40 45
 Ser Tyr Leu Leu Gly Arg Glu Leu Met Ala Leu Gly Ser Asp Pro Arg
 50 55 60
 Val Thr Gln Leu Gln Phe Lys Val Val Arg Val Leu Glu Met Leu Glu
 65 70 75 80
 Ala Leu Val Asn Glu Gly Ser Leu Ala Leu Glu Glu Leu Lys Met Glu
 85 90 95
 Arg Asp His Leu Arg Lys Glu Val Glu Gly Leu Arg Arg Gln Ser Pro
 100 105 110
 Pro Ala Ser Gly Glu Trp Pro Asp Ser Thr Lys Arg Arg Pro Arg Arg
 115 120 125
 Lys Lys Arg Lys Arg Cys Cys Gly Tyr
 130 135 137

<210> 1383
 <211> 90
 <212>Amino acid
 <213> Homo sapiens

<400> 1383
 Pro Arg Asn Asp His Arg Leu Thr Gln Ser Arg Arg Asp Ser Ser Ser
 1 5 10 15
 Lys Thr Arg Ala Phe Leu Val Pro Arg Phe Leu Pro Ala His Ala Gly
 20 25 30
 Val Thr Ser Glu Glu Arg Thr Ala Met Lys Arg Glu Gly Gly Ala Ala
 35 40 45
 His Leu Cys Ser Asp Ser Leu Pro Glu Ser Gln Gln Asp Gly Asn
 50 55 60
 His Ala Pro Asn Phe Ser Ser His Gly Ser Cys Arg Arg Arg Gln Arg
 65 70 75 80
 Arg Arg His Asp Lys Ala Leu His Ala Arg
 85 90

<210> 1384
 <211> 166
 <212>Amino acid
 <213> Homo sapiens

<400> 1384
 Thr His Ala Ser Glu Lys Ser Arg Ala Thr Met Ser Ser Trp Ser Arg
 1 5 10 15

Gln Arg Pro Lys Ser Pro Gly Gly Ile Gln Pro His Val Ser Arg Thr
 20 25 30
 Leu Phe Leu Leu Leu Leu Ala Ala Ser Ala Trp Gly Val Thr Leu
 35 40 45
 Ser Pro Lys Asp Cys Gln Val Phe Arg Ser Asp His Gly Ser Ser Ile
 50 55 60
 Ser Cys Gln Pro Pro Ala Glu Ile Pro Gly Tyr Leu Pro Ala Asp Thr
 65 70 75 80
 Val His Leu Ala Val Glu Phe Phe Asn Leu Thr His Leu Pro Ala Asn
 85 90 95
 Leu Leu Gln Gly Ala Ser Lys Leu Gln Glu Leu His Leu Ser Ser Asn
 100 105 110
 Gly Leu Glu Ser Leu Ser Pro Glu Phe Leu Arg Pro Val Pro Gln Leu
 115 120 125
 Arg Val Leu Asp Leu Thr Arg Asn Ala Leu Thr Gly Leu Pro Pro Gly
 130 135 140
 Leu Phe Gln Ala Ser Ala Thr Leu Asp Thr Leu Val Leu Lys Glu Asn
 145 150 155 160
 Gln Leu Glu Val Leu Glu
 165 166

<210> 1385
<211> 164
<212>Amino acid
<213> Homo sapiens

<400> 1385
 Glu Arg Pro Arg Ile Met Asp Leu Ala Gly Leu Leu Lys Ser Gln Phe
 1 5 10 15
 Leu Cys His Leu Val Phe Cys Tyr Val Phe Ile Ala Ser Gly Leu Ile
 20 25 30
 Ile Asn Thr Ile Gln Leu Phe Thr Leu Leu Leu Trp Pro Ile Asn Lys
 35 40 45
 Gln Leu Phe Arg Lys Ile Asn Cys Arg Leu Ser Tyr Cys Ile Ser Ser
 50 55 60
 Gln Leu Val Met Leu Leu Glu Trp Trp Ser Gly Thr Glu Cys Thr Ile
 65 70 75 80
 Phe Thr Asp Pro Arg Ala Tyr Leu Lys Tyr Gly Lys Glu Asn Ala Ile
 85 90 95
 Val Val Leu Asn His Lys Phe Glu Ile Asp Phe Leu Cys Gly Trp Ser
 100 105 110
 Leu Ser Glu Arg Phe Gly Leu Leu Gly Val Ser Gln Lys Cys Ile Pro
 115 120 125
 Pro Cys Leu Thr His Phe Phe Gly Ser Ala Pro Pro Leu Val Phe Leu
 130 135 140
 Leu Leu Val Ile Gln Asn Leu Glu Lys Asn Gln Gln Ser Phe Tyr Leu
 145 150 155 160
 Met Lys Trp Ser
 164

<210> 1386
<211> 289
<212>Amino acid
<213> Homo sapiens

<400> 1386
 Met Ile Val Phe Gly Trp Ala Val Phe Leu Ala Ser Arg Ser Leu Gly
 1 5 10 15
 Gln Gly Leu Leu Leu Thr Leu Glu Glu His Ile Ala His Phe Leu Gly
 20 25 30
 Thr Gly Gly Ala Ala Thr Thr Met Gly Asn Ser Cys Ile Cys Arg Asp
 35 40 45
 Asp Ser Gly Thr Asp Asp Ser Val Asp Thr Gln Gln Gln Ala Glu
 50 55 60
 Asn Ser Ala Val Pro Thr Ala Asp Thr Arg Ser Gln Pro Arg Asp Pro
 65 70 75 80
 Val Arg Pro Pro Arg Arg Gly Arg Gly Pro His Glu Pro Arg Arg Lys
 85 90 95
 Lys Gln Asn Val Asp Gly Leu Val Leu Asp Thr Leu Ala Val Ile Arg
 100 105 110
 Thr Leu Val Asp Asn Asp Gln Glu Pro Pro Tyr Ser Met Ile Thr Leu
 115 120 125
 His Glu Met Ala Glu Thr Asp Glu Gly Trp Leu Asp Val Val Gln Ser
 130 135 140
 Leu Ile Arg Val Ile Pro Leu Glu Asp Pro Leu Gly Pro Ala Val Ile
 145 150 155 160
 Thr Leu Leu Leu Asp Glu Cys Pro Leu Pro Thr Lys Asp Ala Leu Gln
 165 170 175
 Lys Leu Thr Glu Ile Leu Asn Leu Asn Gly Glu Val Ala Cys Gln Asp
 180 185 190
 Ser Ser His Pro Ala Lys His Arg Asn Thr Ser Ala Val Leu Gly Cys
 195 200 205
 Leu Ala Glu Lys Leu Ala Gly Pro Ala Ser Ile Gly Leu Leu Ser Pro
 210 215 220
 Gly Ile Leu Glu Tyr Leu Leu Gln Cys Leu Leu Gln Ser His Pro Thr
 225 230 235 240
 Val Met Leu Phe Ala Leu Ile Ala Leu Glu Lys Phe Ala Gln Thr Ser
 245 250 255
 Glu Asn Lys Leu Thr Ile Ser Glu Ser Ser Ile Ser Asp Arg Leu Val
 260 265 270
 Thr Leu Glu Ser Trp Ala Asn Asp Pro Asp Tyr Leu Lys Arg Gln Val
 275 280 285
 Gly
 289

<210> 1387
<211> 320
<212>Amino acid
<213> Homo sapiens

<400> 1387
 Arg Phe Gly Thr Arg Gly Leu Ala Lys Ser Lys Gly Val Val Leu Met
 1 5 10 15
 Ala Leu Cys Ala Leu Thr Arg Ala Leu Arg Ser Leu Asn Leu Ala Pro
 20 25 30
 Pro Thr Val Ala Ala Pro Ala Pro Ser Leu Phe Pro Ala Ala Gln Met
 35 40 45
 Met Asn Asn Gly Leu Leu Gln Gln Pro Ser Ala Leu Met Leu Leu Pro
 50 55 60
 Cys Arg Pro Val Leu Thr Ser Val Ala Leu Asn Ala Asn Phe Val Ser
 65 70 75 80
 Trp Lys Ser Arg Thr Lys Tyr Thr Ile Thr Pro Val Lys Met Arg Lys
 85 90 95

Ser Gly Gly Arg Asp His Thr Gly Arg Ile Arg Val His Gly Ile Gly
 100 105 110
 Gly Gly His Lys Gln Arg Tyr Arg Met Ile Asp Phe Leu Arg Phe Arg
 115 120 125
 Pro Glu Glu Thr Lys Ser Gly Pro Phe Glu Glu Lys Val Ile Gln Val
 130 135 140
 Arg Tyr Asp Pro Cys Arg Ser Ala Asp Ile Ala Leu Val Ala Gly Gly
 145 150 155 160
 Ser Arg Lys Arg Trp Ile Ile Ala Thr Glu Asn Met Gln Ala Gly Asp
 165 170 175
 Thr Ile Leu Asn Ser Asn His Ile Gly Arg Met Ala Val Ala Ala Arg
 180 185 190
 Glu Gly Asp Ala His Pro Leu Gly Ala Leu Pro Val Gly Thr Leu Ile
 195 200 205
 Asn Asn Val Glu Ser Glu Pro Gly Arg Gly Ala Gln Tyr Ile Arg Ala
 210 215 220
 Ala Gly Thr Cys Gly Val Leu Leu Arg Lys Val Asn Gly Thr Ala Ile
 225 230 235 240
 Ile Gln Leu Pro Ser Lys Arg Gln Met Gln Val Leu Glu Thr Cys Val
 245 250 255
 Ala Thr Val Gly Arg Val Ser Asn Val Asp His Asn Lys Arg Val Ile
 260 265 270
 Gly Lys Ala Gly Arg Asn Arg Trp Leu Gly Lys Arg Pro Asn Ser Gly
 275 280 285
 Arg Trp His Arg Lys Gly Gly Trp Ala Gly Arg Lys Ile Arg Pro Leu
 290 295 300
 Pro Pro Met Lys Ser Tyr Val Lys Leu Pro Ser Ala Ser Ala Gln Ser
 305 310 315 320

<210> 1388
 <211> 140
 <212>Amino acid
 <213> Homo sapiens

<400> 1388
 Pro Val Gln Gly Ala Arg Cys Trp Leu Asp Ala Arg Arg Asn Val Arg
 1 5 10 15
 Val Phe Ser Gly Val Cys Cys Gly Cys Gly Ile His Gly Tyr Trp Ala
 20 25 30
 Glu Pro Cys Gly Gly Cys Gly Ala Met Glu Gly Leu Arg Ser Ser Val
 35 40 45
 Glu Leu Asp Pro Glu Leu Thr Pro Gly Lys Leu Asp Glu Glu Met Val
 50 55 60
 Gly Leu Pro Pro His Asp Ala Ser Pro Gln Val Thr Phe His Ser Leu
 65 70 75 80
 Asp Gly Lys Thr Val Val Cys Pro His Phe Met Gly Leu Leu Leu Gly
 85 90 95
 Leu Leu Leu Leu Leu Thr Leu Ser Val Arg Asn Gln Leu Cys Val Arg
 100 105 110
 Gly Glu Arg Gln Leu Ala Glu Thr Leu His Ser Gln Val Lys Glu Lys
 115 120 125
 Ser Gln Leu Ile Gly Lys Lys Thr Asp Cys Arg Asp
 130 135 140

<210> 1389
 <211> 448

<212>Amino acid
 <213> Homo sapiens

<400> 1389
 Gly Ala Arg Gly Arg Pro Leu Ala Glu Thr Trp Pro Phe Leu Thr Ala
 1 5 10 15
 Pro Val Leu Pro Gly Gln Leu Gln Ile Thr Glu Pro Thr Met Ala Glu
 20 25 30
 Lys Gly Asp Cys Ile Ala Ser Val Tyr Gly Tyr Asp Leu Gly Arg
 35 40 45
 Phe Val Asp Phe Gln Pro Leu Gly Phe Gly Val Asn Gly Leu Val Leu
 50 55 60
 Ser Ala Val Asp Ser Arg Ala Cys Arg Lys Val Ala Val Lys Lys Ile
 65 70 75 80
 Ala Leu Ser Asp Ala Arg Ser Met Lys His Ala Leu Arg Glu Ile Lys
 85 90 95
 Ile Ile Arg Arg Leu Asp His Asp Asn Ile Val Lys Val Tyr Glu Val
 100 105 110
 Leu Gly Pro Lys Gly Thr Asp Leu Gln Gly Glu Leu Phe Lys Phe Ser
 115 120 125
 Val Ala Tyr Ile Val Gln Glu Tyr Met Glu Thr Asp Leu Ala Arg Leu
 130 135 140
 Leu Glu Gln Gly Thr Leu Ala Glu Glu His Ala Lys Leu Phe Met Tyr
 145 150 155 160
 Gln Leu Leu Arg Gly Leu Lys Tyr Ile His Ser Ala Asn Val Leu His
 165 170 175
 Arg Asp Leu Lys Pro Ala Asn Ile Phe Ile Ser Thr Glu Asp Leu Val
 180 185 190
 Leu Lys Ile Gly Asp Phe Gly Leu Ala Arg Ile Val Asp Gln His Tyr
 195 200 205
 Ser His Lys Gly Tyr Leu Ser Glu Gly Leu Val Thr Lys Trp Tyr Arg
 210 215 220
 Ser Pro Arg Leu Leu Leu Ser Pro Asn Asn Tyr Thr Lys Ala Ile Asp
 225 230 235 240
 Met Trp Ala Ala Gly Cys Ile Leu Ala Glu Met Leu Thr Gly Arg Met
 245 250 255
 Leu Phe Ala Gly Ala His Glu Leu Glu Gln Met Gln Leu Ile Leu Glu
 260 265 270
 Thr Ile Pro Val Ile Arg Glu Glu Asp Lys Asp Glu Leu Leu Arg Val
 275 280 285
 Met Pro Ser Phe Val Ser Ser Thr Trp Glu Val Lys Arg Pro Leu Arg
 290 295 300
 Lys Leu Leu Pro Glu Val Asn Ser Glu Ala Ile Asp Phe Leu Glu Lys
 305 310 315 320
 Ile Leu Thr Phe Asn Pro Met Asp Arg Leu Thr Ala Glu Met Gly Leu
 325 330 335
 Gln His Pro Tyr Met Ser Pro Tyr Ser Cys Pro Glu Asp Glu Pro Thr
 340 345 350
 Ser Gln His Pro Phe Arg Ile Glu Asp Glu Ile Asp Asp Ile Val Leu
 355 360 365
 Met Ala Ala Asn Gln Ser Gln Leu Ser Asn Trp Asp Thr Cys Ser Ser
 370 375 380
 Arg Tyr Pro Val Ser Leu Ser Ser Asp Leu Glu Trp Arg Pro Asp Arg
 385 390 395 400
 Cys Gln Asp Ala Ser Glu Val Gln Arg Asp Pro Arg Ala Gly Ser Ala
 405 410 415
 Pro Leu Ala Glu Asn Val Gln Val Asp Pro Arg Lys Asp Ser His Ser
 420 425 430
 Ser Ser Ala Ser Cys Gln Ala Gly Arg Asn Gly Val Ser Arg Tyr Gln
 435 440 445 448

<210> 1390
 <211> 815
 <212>Amino acid
 <213> Homo sapiens

<400> 1390
 Met Arg Thr Leu Gly Thr Cys Leu Ala Thr Leu Ala Gly Leu Leu Leu
 1 5 10 15
 Thr Ala Ala Gly Glu Thr Phe Ser Gly Gly Cys Leu Phe Asp Glu Pro
 20 25 30
 Tyr Ser Thr Cys Gly Tyr Ser Gln Ser Glu Gly Asp Asp Phe Asn Trp
 35 40 45
 Glu Gln Val Asn Thr Leu Thr Lys Pro Thr Ser Asp Pro Trp Met Pro
 50 55 60
 Ser Gly Ser Phe Met Leu Val Asn Ala Ser Gly Arg Pro Glu Gly Gln
 65 70 75 80
 Arg Ala His Leu Leu Leu Pro Gln Leu Lys Glu Asn Asp Thr His Cys
 85 90 95
 Ile Asp Phe His Tyr Phe Val Ser Ser Lys Ser Asn Ser Pro Pro Gly
 100 105 110
 Leu Leu Asn Val Tyr Val Lys Val Asn Asn Gly Pro Leu Gly Asn Pro
 115 120 125
 Ile Trp Asn Ile Ser Gly Asp Pro Thr Arg Thr Trp Asn Arg Ala Glu
 130 135 140
 Leu Ala Ile Ser Thr Phe Trp Pro Asn Phe Tyr Gln Val Ile Phe Glu
 145 150 155 160
 Val Ile Thr Ser Gly His Gln Gly Tyr Leu Ala Ile Asp Glu Val Lys
 165 170 175
 Val Leu Gly His Pro Cys Thr Arg Thr Pro His Phe Leu Arg Ile Gln
 180 185 190
 Asn Val Glu Val Asn Ala Gly Gln Phe Ala Thr Phe Gln Cys Ser Ala
 195 200 205
 Ile Gly Arg Thr Val Ala Gly Asp Arg Leu Trp Leu Gln Gly Ile Asp
 210 215 220
 Val Arg Asp Ala Pro Leu Lys Glu Ile Lys Val Thr Ser Ser Arg Arg
 225 230 235 240
 Phe Ile Ala Ser Phe Asn Val Val Asn Thr Thr Lys Arg Asp Ala Gly
 245 250 255
 Lys Tyr Arg Cys Met Ile Arg Thr Glu Gly Gly Val Gly Ile Ser Asn
 260 265 270
 Tyr Ala Glu Leu Val Val Lys Glu Pro Pro Val Pro Ile Ala Pro Pro
 275 280 285
 Gln Leu Ala Ser Val Gly Ala Thr Tyr Leu Trp Ile Gln Leu Asn Ala
 290 295 300
 Asn Ser Ile Asn Gly Asp Gly Pro Ile Val Ala Arg Glu Val Glu Tyr
 305 310 315 320
 Cys Thr Ala Ser Gly Ser Trp Asn Asp Arg Gln Pro Val Asp Ser Thr
 325 330 335
 Ser Tyr Lys Ile Gly His Leu Asp Pro Asp Thr Glu Tyr Glu Ile Ser
 340 345 350
 Val Leu Leu Thr Arg Pro Gly Glu Gly Gly Thr Gly Ser Pro Gly Pro
 355 360 365
 Ala Leu Arg Thr Arg Thr Lys Cys Ala Asp Pro Met Arg Gly Pro Arg
 370 375 380
 Lys Leu Glu Val Val Glu Val Lys Ser Arg Gln Ile Thr Ile Arg Trp
 385 390 395 400

Glu Pro Phe Gly Tyr Asn Val Thr Arg Cys His Ser Tyr Asn Leu Thr
 405 410 415
 Val His Tyr Cys Tyr Gln Val Gly Gly Gln Val Arg Glu Glu
 420 425 430
 Val Ser Trp Asp Thr Glu Asn Ser His Pro Gln His Thr Ile Thr Asn
 435 440 445
 Leu Ser Pro Tyr Thr Asn Val Ser Val Lys Leu Ile Leu Met Asn Pro
 450 455 460
 Glu Gly Arg Lys Glu Ser Gln Glu Leu Ile Val Gln Thr Asp Glu Asp
 465 470 475 480
 Leu Pro Gly Ala Val Pro Thr Glu Ser Ile Gln Gly Ser Thr Phe Glu
 485 490 495
 Glu Lys Ile Phe Leu Gln Trp Arg Glu Pro Thr Gln Thr Tyr Gly Val
 500 505 510
 Ile Thr Leu Tyr Glu Ile Thr Tyr Lys Ala Val Ser Ser Phe Asp Pro
 515 520 525
 Glu Ile Asp Leu Ser Asn Gln Ser Gly Arg Val Ser Lys Leu Gly Asn
 530 535 540
 Glu Thr His Phe Leu Phe Phe Gly Leu Tyr Pro Gly Thr Thr Tyr Ser
 545 550 555 560
 Phe Thr Ile Arg Ala Ser Thr Ala Lys Gly Phe Gly Pro Pro Ala Thr
 565 570 575
 Asn Gln Phe Thr Thr Lys Ile Ser Ala Pro Ser Met Pro Ala Tyr Glu
 580 585 590
 Leu Glu Thr Pro Leu Asn Gln Thr Asp Asn Thr Val Thr Val Met Leu
 595 600 605
 Lys Pro Ala His Ser Arg Gly Ala Pro Val Ser Val Tyr Gln Ile Val
 610 615 620
 Val Glu Glu Glu Arg Pro Arg Arg Thr Lys Lys Thr Thr Glu Ile Leu
 625 630 635 640
 Lys Cys Tyr Pro Val Pro Ile His Phe Gln Asn Ala Ser Leu Leu Asn
 645 650 655
 Ser Gln Tyr Phe Ala Ala Glu Phe Pro Ala Asp Ser Leu Gln Ala
 660 665 670
 Ala Gln Pro Phe Thr Ile Gly Asp Asn Lys Thr Tyr Asn Gly Tyr Trp
 675 680 685
 Asn Thr Pro Leu Leu Pro Tyr Lys Ser Tyr Arg Ile Tyr Phe Gln Ala
 690 695 700
 Ala Ser Arg Ala Asn Gln Glu Thr Lys Ile Asp Cys Val Gln Val Ala
 705 710 715 720
 Thr Lys Gly Ala Ala Thr Pro Lys Pro Val Pro Glu Pro Glu Lys Gln
 725 730 735
 Thr Asp His Thr Val Lys Ile Ala Gly Val Ile Ala Gly Ile Leu Leu
 740 745 750
 Phe Val Ile Ile Phe Leu Gly Val Val Leu Val Met Lys Lys Arg Leu
 755 760 765
 Tyr Lys His Gly Ala Ser Ile Cys Ser Ala Ser Gly Glu Ala Ser Gly
 770 775 780
 Ser Phe Gln Ser Trp Arg Lys Ala Lys His Lys Gln Ala Cys Pro Met
 785 790 795 800
 Ala Arg Ala Gly Ala Arg Glu Arg Ala Gly Gly Cys Leu Lys Leu
 805 810 815

<210> 1391
 <211> 142
 <212>Amino acid
 <213> Homo sapiens

Gly Ile Arg Gln Leu Leu Gln Leu Ser Arg Ala Ser Met Ala Ala Arg
 1 5 10 15
 Lys Ser Trp Thr Ala Leu Arg Leu Cys Ala Thr Val Val Val Leu Asp
 20 25 30
 Met Val Val Cys Lys Gly Phe Val Gln Asp Leu Asp Glu Ser Phe Lys
 35 40 45
 Glu Asn Arg Asn Asp Asp Ile Trp Leu Val His Phe Tyr Ala Pro Trp
 50 55 60
 Cys Gly His Cys Lys Lys Leu Glu Pro Ile Trp Asn Glu Ala Gly Leu
 65 70 75 80
 Glu Met Lys Ser Ile Gly Ser Pro Val Lys Ala Gly Lys Met Asp Ala
 85 90 95
 Thr Ser Tyr Ser Ser Ile Ala Ser Glu Phe Gly Val Arg Gly Tyr Pro
 100 105 110
 Thr Ile Lys Leu Ala Leu Ile Arg Pro Leu Pro Ser Gln Gln Met Phe
 115 120 125
 Glu His Met His Lys Arg His Arg Val Phe Phe Val Tyr Val
 130 135 140 142

<210> 1392
<211> 282
<212>Amino acid
<213> Homo sapiens

<400> 1392
 Gly Leu Val Ile Val Ile Ser His Phe Ser Pro Ser Pro Gly Leu Leu
 1 5 10 15
 Pro Ala Thr Gln Ser Pro Ala Met Ser Asp Pro Ile Thr Leu Asn Val
 20 25 30
 Gly Gly Lys Leu Tyr Thr Thr Ser Leu Ala Thr Leu Thr Ser Phe Pro
 35 40 45
 Asp Ser Met Leu Gly Ala Met Phe Ser Gly Lys Met Pro Thr Lys Arg
 50 55 60
 Asp Ser Gln Gly Asn Cys Phe Ile Asp Arg Asp Gly Lys Val Phe Arg
 65 70 75 80
 Tyr Ile Leu Asn Phe Leu Arg Thr Ser His Leu Asp Leu Pro Glu Asp
 85 90 95
 Phe Gln Glu Met Gly Leu Leu Arg Arg Glu Ala Asp Phe Tyr Gln Val
 100 105 110
 Gln Pro Leu Ile Glu Ala Leu Gln Glu Lys Glu Val Glu Leu Ser Lys
 115 120 125
 Ala Glu Lys Asn Ala Met Leu Asn Ile Thr Leu Asn Gln Arg Val Gln
 130 135 140
 Thr Val His Phe Thr Val Arg Glu Ala Pro Gln Ile Tyr Ser Leu Ser
 145 150 155 160
 Ser Ser Ser Met Glu Val Phe Asn Ala Asn Ile Phe Ser Thr Ser Cys
 165 170 175
 Leu Phe Leu Lys Leu Leu Gly Ser Lys Leu Phe Tyr Cys Ser Asn Gly
 180 185 190
 Asn Leu Ser Ser Ile Thr Ser His Leu Gln Asp Pro Asn His Leu Thr
 195 200 205
 Leu Asp Trp Val Ala Asn Val Glu Gly Leu Pro Glu Glu Glu Tyr Thr
 210 215 220
 Lys Gln Asn Leu Lys Arg Leu Trp Val Val Pro Ala Asn Lys Gln Ile
 225 230 235 240
 Asn Ser Phe Gln Val Phe Val Glu Glu Val Leu Lys Ile Ala Leu Ser
 245 250 255
 Asp Gly Phe Cys Ile Asp Ser Ser His Pro His Ala Leu Asp Phe Met
 260 265 270

<210> 1393
<211> 308
<212>Amino acid
<213> Homo sapiens

<400> 1393
Ser Cys Ala Asp Asn Leu Val Ala Ala Ser Gly Gly Cys Trp Phe Val
1 5 10 15
Leu Gly Glu Arg Arg Ala Gly Ser Leu Leu Ser Ala Ser Tyr Gly Thr
20 25 30
Phe Ala Met Pro Gly Met Val Leu Phe Gly Arg Arg Trp Ala Ile Ala
35 40 45
Ser Asp Asp Leu Val Phe Pro Gly Phe Glu Leu Val Val Arg Val
50 55 60
Leu Trp Trp Ile Gly Ile Leu Thr Leu Tyr Leu Met His Arg Gly Lys
65 70 75 80
Leu Asp Cys Ala Gly Gly Ala Leu Leu Ser Ser Tyr Leu Ile Val Leu
85 90 95
Met Ile Leu Leu Ala Val Val Ile Cys Thr Val Ser Ala Ile Met Cys
100 105 110
Val Ser Met Arg Gly Thr Ile Cys Asn Pro Gly Pro Arg Lys Ser Met
115 120 125
Ser Lys Ile Leu Tyr Ile Arg Leu Ala Leu Phe Phe Pro Glu Met Val
130 135 140
Trp Ala Ser Leu Gly Ala Ala Trp Val Ala Asp Gly Val Gln Cys Asp
145 150 155 160
Arg Thr Val Val Asn Gly Ile Ile Ala Thr Val Val Val Ser Trp Ile
165 170 175
Ile Ile Ala Ala Thr Val Val Ser Ile Ile Ile Val Phe Asp Pro Leu
180 185 190
Gly Gly Lys Met Ala Pro Tyr Ser Ser Ala Gly Pro Ser His Leu Asp
195 200 205
Ser His Asp Ser Ser Gln Leu Leu Asn Gly Leu Lys Thr Ala Ala Thr
210 215 220
Ser Val Trp Glu Thr Arg Ile Lys Leu Leu Cys Cys Cys Ile Gly Lys
225 230 235 240
Asp Asp His Thr Arg Val Ala Phe Ser Ser Thr Ala Glu Leu Phe Ser
245 250 255
Thr Tyr Phe Ser Asp Thr Asp Leu Val Pro Ser Asp Ile Ala Ala Gly
260 265 270
Leu Ala Leu Leu His Gln Gln Gln Asp Asn Ile Arg Asn Asn Gln Asp
275 280 285
Leu Pro Arg Trp Ser Ala Met Pro Gln Gly Ala Pro Arg Lys Leu Ile
290 295 300
Trp Met Gln Asn
305 308

<210> 1394
<211> 238
<212>Amino acid
<213> Homo sapiens

<400> 1394

| | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Phe | Arg | Ala | Ala | Thr | Ala | Ala | Lys | Gly | Asn | Gly | Gly | Gly | Gly |
| 1 | | | | | | | 5 | | 10 | | | 15 | |
| Arg | Ala | Gly | Ala | Gly | Asp | Ala | Ser | Gly | Thr | Arg | Lys | Lys | Pro |
| | | | | | | | 20 | | 25 | | | 30 | |
| Gly | Pro | Leu | Ala | Thr | Ala | Tyr | Leu | Val | Ile | Tyr | Asn | Val | Met |
| | | | | | | | 35 | | 40 | | | 45 | |
| Ala | Gly | Trp | Leu | Val | Ile | Ala | Val | Gly | Leu | Val | Arg | Ala | Tyr |
| | | | | | | | 50 | | 55 | | | 60 | |
| Lys | Gly | Ser | Tyr | His | Ser | Leu | Tyr | Tyr | Ser | Ile | Glu | Lys | Pro |
| | | | | | | | 65 | | 70 | | | 75 | |
| Phe | Phe | Gln | Thr | Gly | Ala | Leu | Leu | Glu | Ile | Leu | His | Cys | Ala |
| | | | | | | | 85 | | 90 | | | 95 | |
| Ile | Val | Pro | Ser | Ser | Val | Val | Leu | Thr | Ser | Phe | Gln | Val | Met |
| | | | | | | | 100 | | 105 | | | 110 | |
| Val | Phe | Leu | Ile | Trp | Ala | Val | Thr | His | Ser | Val | Lys | Glu | Val |
| | | | | | | | 115 | | 120 | | | 125 | |
| Glu | Asp | Ser | Val | Leu | Phe | Val | Ile | Ala | Trp | Thr | Ile | Glu | Ile |
| | | | | | | | 130 | | 135 | | | 140 | |
| Arg | Tyr | Ser | Phe | Tyr | Thr | Phe | Ser | Leu | Leu | Asn | His | Leu | Pro |
| | | | | | | | 145 | | 150 | | | 155 | |
| Ile | Lys | Arg | Ala | Arg | Tyr | Thr | Leu | Phe | Ile | Val | Leu | Tyr | Pro |
| | | | | | | | 165 | | 170 | | | 175 | |
| Val | Ser | Gly | Glu | Leu | Leu | Thr | Ile | Tyr | Ala | Ala | Leu | Pro | Arg |
| | | | | | | | 180 | | 185 | | | 190 | |
| Gln | Ala | Gly | Leu | Tyr | Ser | Ile | Ser | Leu | Pro | Asn | Ser | Thr | Lys |
| | | | | | | | 195 | | 200 | | | 205 | |
| Phe | Leu | Ile | Ser | Gln | Val | Trp | Trp | His | Met | Leu | Ala | val | Ser |
| | | | | | | | 210 | | 215 | | | 220 | |
| Ala | Lys | Ala | Ala | Glu | Met | Pro | Ala | Val | Leu | Lys | Pro | Gly | Pro |
| | | | | | | | 225 | | 230 | | | 235 | |
| | | | | | | | | | | | | | 238 |

<210> 1395

<211> 231

<212>Amino acid

<213> Homo sapiens

<400> 1395

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Leu | Thr | Gly | Val | Gly | Cys | Leu | Val | Ser | Ser | Glu | Ser | Leu | Ser | Cys |
| 1 | | | | | | 5 | | | 10 | | | 15 | | | |
| Val | Gln | Cys | Asn | Ser | Trp | Glu | Lys | Ser | Cys | Val | Asn | Ser | Ile | Ala | Ser |
| | | | | | | 20 | | | 25 | | | 30 | | | |
| Glu | Cys | Pro | Ser | His | Ala | Asn | Thr | Ser | Cys | Ile | Ser | Ser | Ser | Ala | Ser |
| | | | | | | 35 | | | 40 | | | 45 | | | |
| Ser | Ser | Leu | Glu | Thr | Pro | Val | Arg | Leu | Tyr | Gln | Asn | Met | Phe | Cys | Ser |
| | | | | | | 50 | | | 55 | | | 60 | | | |
| Ala | Glu | Asn | Cys | Ser | Glu | Glu | Thr | His | Ile | Thr | Ala | Phe | Thr | Val | His |
| | | | | | | 65 | | | 70 | | | 75 | | | 80 |
| Val | Ser | Ala | Glu | Glu | His | Phe | His | Phe | Val | Ser | Gln | Cys | Cys | Glu | Gly |
| | | | | | | 85 | | | 90 | | | 95 | | | |
| Lys | Glu | Cys | Ser | Asn | Thr | Ser | Asp | Ala | Leu | Asp | Pro | Pro | Leu | Lys | Asn |
| | | | | | | 100 | | | 105 | | | 110 | | | |
| Val | Ser | Ser | Asn | Asn | Ala | Glu | Cys | Pro | Ala | Cys | Tyr | Glu | Ser | Asn | Gly |
| | | | | | | 115 | | | 120 | | | 125 | | | |
| Ser | Cys | Arg | Gly | Lys | Pro | Trp | Lys | Cys | Tyr | Glu | Glu | Glu | Gln | Cys | Val |
| | | | | | | 130 | | | 135 | | | 140 | | | |
| Phe | Leu | Val | Ala | Glu | Leu | Lys | Asn | Asp | Ile | Glu | Ser | Lys | Ser | Leu | Val |
| | | | | | | 145 | | | 150 | | | 155 | | | 160 |

Leu Lys Gly Cys Ser Asn Val Ser Asn Ala Thr Cys Gln Phe Leu Ser
 165 170 175
 Gly Glu Asn Lys Thr Leu Gly Val Ile Phe Arg Lys Phe Glu Cys
 180 185 190
 Ala Asn Val Asn Ser Leu Thr Pro Thr Ser Ala Pro Thr Thr Ser His
 195 200 205
 Asn Val Gly Ser Lys Ala Ser Leu Tyr Leu Leu Ala Leu Ala Ser Leu
 210 215 220
 Leu Leu Arg Gly Leu Leu Pro
 225 230 231

<210> 1396
 <211> 216
 <212>Amino acid
 <213> Homo sapiens

<400> 1396
 Val Pro Ala Arg Arg Arg Ala Met Glu Ile Gly Thr Glu Ile Ser Arg
 1 5 10 15
 Lys Ile Arg Ser Ala Ile Lys Gly Lys Leu Gln Glu Leu Gly Ala Tyr
 20 25 30
 Val Asp Glu Glu Leu Pro Asp Tyr Ile Met Val Met Val Ala Asn Lys
 35 40 45
 Lys Ser Gln Asp Gln Met Thr Glu Asp Leu Ser Leu Phe Leu Gly Asn
 50 55 60
 Asn Thr Ile Arg Phe Thr Val Trp Leu His Gly Val Leu Asp Lys Leu
 65 70 75 80
 Arg Ser Val Thr Thr Glu Pro Ser Ser Leu Lys Ser Ser Asp Thr Asn
 85 90 95
 Ile Phe Asp Ser Asn Val Pro Ser Asn Lys Ser Asn Phe Ser Arg Gly
 100 105 110
 Asp Glu Arg Arg His Glu Ala Ala Val Pro Pro Leu Ala Ile Pro Ser
 115 120 125
 Ala Arg Pro Glu Lys Arg Asp Ser Arg Val Ser Thr Ser Ser Gln Glu
 130 135 140
 Ser Lys Thr Thr Asn Val Arg Gln Thr Tyr Asp Asp Gly Ala Ala Thr
 145 150 155 160
 Arg Leu Met Ser Thr Val Lys Pro Leu Arg Glu Pro Ala Pro Ser Glu
 165 170 175
 Asp Val Ile Asp Ile Lys Pro Glu Pro Asp Asp Leu Ile Asp Glu Asp
 180 185 190
 Leu Asn Phe Val Gln Glu Lys Pro Leu Ser Gln Lys Lys Pro Thr Val
 195 200 205
 Thr Leu Thr Tyr Gly Ser Ser Arg
 210 215 216

<210> 1397
 <211> 135
 <212>Amino acid
 <213> Homo sapiens

<400> 1397
 Ala Ser Arg Val Leu Ala Ala Val Met Gly Leu Pro Trp Gly Gln Pro
 1 5 10 15

His Leu Gly Leu Gln Met Leu Leu Ala Leu Asn Trp Leu Arg Pro
 20 25 30
 Ser Leu Ser Leu Glu Leu Val Pro Tyr Thr Pro Gln Ile Thr Ala Trp
 35 40 45
 Asp Leu Glu Gly Lys Val Thr Ala Thr Thr Phe Ser Leu Glu Gln Pro
 50 55 60
 Arg Cys Val Phe Asp Gly Leu Ala Ser Ala Ser Asp Thr Val Trp Leu
 65 70 75 80
 Val Val Ala Phe Ser Asn Ala Ser Arg Gly Phe Gln Asn Pro Glu Thr
 85 90 95
 Leu Ala Asp Ile Pro Ala Ser Pro Gln Leu Leu Thr Asp Gly His Tyr
 100 105 110
 Met Thr Leu Pro Leu Ser Pro Asp Gln Leu Pro Cys Gly Asp Pro Met
 115 120 125
 Ala Gly Ser Gly Ser Ala Pro
 130 135

<210> 1398
 <211> 41
 <212>Amino acid
 <213> Homo sapiens

<400> 1398
 Asn Ser Leu Asn Asn Phe Phe Glu Thr Glu Ser Cys Cys Val Ala
 1 5 10 15
 Gln Ala Gly Val Gln Trp Arg Asp Leu Gly Ser Leu Gln Ala Pro Pro
 20 25 30
 Pro Gly Phe Lys Arg Phe Ser Cys Leu
 35 40 41

<210> 1399
 <211> 151
 <212>Amino acid
 <213> Homo sapiens

<400> 1399
 Lys Ser Leu Pro Leu Gln Lys His Pro Lys Pro Ser Cys Gln Glu Asp
 1 5 10 15
 Gln Gly Leu Gly Arg Gly Ser Leu Ser Gly His Ser Pro Leu Thr Leu
 20 25 30
 Leu Thr Phe Leu Thr Ser Cys Ala Leu Gly Asp Gln Gln Leu Leu Pro
 35 40 45
 Pro Arg Thr Ser Gly Ser Leu Cys Gln Glu Ser Met Ser Glu Gln Ser
 50 55 60
 Cys Gln Met Ser Glu Leu Arg Leu Leu Leu Gly Lys Cys Arg Ser
 65 70 75 80
 Gly Lys Ser Ala Thr Gly Asn Ala Ile Leu Gly Lys His Val Phe Lys
 85 90 95
 Ser Lys Phe Ser Asp Gln Thr Val Ile Lys Met Cys Gln Arg Glu Ser
 100 105 110
 Trp Val Leu Arg Glu Arg Lys Val Val Val Ile Asp Thr Pro Asp Leu
 115 120 125
 Phe Ser Ser Ile Ala Cys Ala Glu Asp Lys Gln Arg Asn Ile Gln His
 130 135 140

Leu Leu Glu Leu Ser Ala Pro
145 150 151

<210> 1400
<211> 324
<212>Amino acid
<213> Homo sapiens

<400> 1400
Phe Val Glu Thr Thr Val Ser Val Gln Ser Ala Glu Ser Ser Asp Ala
1 5 10 15
Leu Ser Trp Ser Arg Leu Pro Arg Ala Leu Ala Ser Val Gly Pro Glu
20 25 30
Glu Ala Arg Ser Gly Ala Pro Val Gly Gly Gly Arg Trp Gln Leu Ser
35 40 45
Asp Arg Val Glu Gly Gly Ser Pro Thr Leu Gly Leu Leu Gly Gly Ser
50 55 60
Pro Ser Ala Gln Pro Gly Thr Gly Asn Val Glu Ala Gly Ile Pro Ser
65 70 75 80
Gly Arg Met Leu Glu Pro Leu Pro Cys Trp Asp Ala Ala Lys Asp Leu
85 90 95
Lys Glu Pro Gln Cys Pro Pro Gly Asp Arg Val Gly Val Gln Pro Gly
100 105 110
Asn Ser Arg Val Trp Gln Gly Thr Met Glu Lys Ala Gly Leu Ala Trp
115 120 125
Thr Arg Gly Thr Gly Val Gln Ser Glu Gly Thr Trp Glu Ser Gln Arg
130 135 140
Gln Asp Ser Asp Ala Leu Pro Ser Pro Glu Leu Leu Pro Gln Asp Gln
145 150 155 160
Asp Lys Pro Phe Leu Arg Lys Ala Cys Ser Pro Ser Asn Ile Pro Ala
165 170 175
Val Ile Ile Thr Asp Met Gly Thr Gln Glu Asp Gly Ala Leu Glu Glu
180 185 190
Thr Gln Gly Ser Pro Arg Gly Asn Leu Pro Leu Arg Lys Leu Ser Ser
195 200 205
Ser Ser Ala Ser Ser Thr Gly Phe Ser Ser Ser Tyr Glu Asp Ser Glu
210 215 220
Glu Asp Ile Ser Ser Asp Pro Glu Arg Thr Leu Asp Pro Asn Ser Ala
225 230 235 240
Phe Leu His Thr Leu Asp Gln Gln Lys Pro Arg Val Val Glu Ser Arg
245 250 255
Ser Val Thr Gln Ala Gly Val Gln Trp His Asp Ile Gly Ser Leu Gln
260 265 270
Pro Leu Pro Pro Trp Ile Gln Ala Ile Leu His Ala Ser Ala Phe Arg
275 280 285
Ile Ala Gly Thr Thr Gly Ala Cys His His Ala Arg Ile Ile Phe Gly
290 295 300
Phe Leu Val Glu Arg Gly Phe His His Val Gly Gln Asp Gly Leu Tyr
305 310 315 320
Leu Leu Ile Leu
324

<210> 1401
<211> 76
<212>Amino acid
<213> Homo sapiens

<220>

<221> misc_feature
<222> (1)...(76)
<223> X = any amino acid or stop code

<400> 1401
Lys Ile Cys Ser Ser Tyr Phe Leu Arg Ile Ile Cys Ile Leu Gln Lys
1 5 10 15
Glu Ala Gln Glu Ala Ser Asn Leu Tyr Thr Ser Cys Asp Phe Phe Ser
20 25 30
Pro Ala Phe Tyr Phe Val Ile Tyr Arg Leu Tyr Asn Phe Lys Ile His
35 40 45
Trp Pro Gly Ala Val Ala His Thr Tyr Ser Pro Ser Thr Leu Gly Gly
50 55 60
Arg Gly Arg Trp Val Thr Xaa Gly Arg Glu Phe Met
65 70 75 76

<210> 1402
<211> 102
<212>Amino acid
<213> Homo sapiens

<400> 1402
Leu Ile Leu Ser Leu Pro Leu Leu Tyr Gly His Leu Lys Ser Tyr Thr
1 5 10 15
Phe Pro Ser Glu His Tyr Leu His Leu Leu Gln Thr Phe Ala Thr Phe
20 25 30
Asn Lys Tyr Leu Asn Val Cys Val Ile His His Lys Pro
35 40 45
Val Val Pro Ala Ile Gln Gly Thr Asn Val Gly Gly Ser Leu Glu Pro
50 55 60
Arg Arg Leu Arg Leu Gln Gln Ala Met Ile Val Pro Leu His Phe Gly
65 70 75 80
Leu Gly Asn Arg Val Arg Pro Cys Leu Lys Gln Gln Gln Gln
85 90 95
Gln Gln Gln Lys Lys
100 102

<210> 1403
<211> 124
<212>Amino acid
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(124)
<223> X = any amino acid or stop code

<400> 1403
Arg Met Glu Thr Lys Pro Val Ile Thr Cys Leu Lys Thr Leu Leu Ile
1 5 10 15

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ile | Tyr | Ser | Phe | Val | Phe | Trp | Ile | Thr | Gly | Val | Ile | Leu | Leu | Ala | Ala |
| | | | | | | | 20 | | | | 25 | | | | 30 |
| Gly | Val | Trp | Gly | Lys | Leu | Thr | Leu | Gly | Ser | Tyr | Ile | Ser | Leu | Ile | Ala |
| | | | | | | | | | | 35 | | 40 | | | 45 |
| Glu | Asn | Ser | Thr | Tyr | Ala | Pro | Tyr | Val | Leu | Ile | Val | Thr | Gly | Thr | Thr |
| | | | | | | | | | | 50 | | 55 | | | 60 |
| Ile | Val | Ala | Tyr | Pro | Leu | Val | Xaa | Phe | Phe | Phe | Ser | Tyr | Ser | Ser | Gly |
| | | | | | | | | | | 65 | | 70 | | | 75 |
| Phe | Ser | Tyr | Ile | Leu | Ala | Val | Arg | Leu | Ile | Ala | Gly | Ile | Ala | Leu | Val |
| | | | | | | | | | | 85 | | 90 | | | 95 |
| Tyr | Asn | Tyr | Ile | Pro | Arg | Ser | Ser | Ser | Arg | Ala | Leu | Val | Arg | Leu | Val |
| | | | | | | | | | | 100 | | 105 | | | 110 |
| Val | Leu | Ieu | Arg | Phe | Leu | Leu | Ser | Arg | His | Pro | Ser | | | | |
| | | | | | | | | | | 115 | | 120 | | | 124 |

```
<210> 1404
<211> 136
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(136)
<223> X = any amino acid or stop code
```

```

<400> 1404
Asn Ala Glu His Pro Gly Met Asp Arg His Asp Leu Cys Gln Lys Ala
      5          10          15
Lys Leu Ala Glu His Ala Glu Arg Asp Asp Asp Met Ala Ala Cys Met
      20          25          30
Lys Thr Val Thr Asp Gln Gly Ala Glu Leu Ser Asn Glu Glu Arg Asn
      35          40          45
Leu Leu Ser Asp Ala His Thr Asn Ala Val Xaa Ala Arg Arg Ser Ser
      50          55          60
Trp Met Gly Ala Xaa Arg Ile Glu Gln Lys Thr Glu Gly Ala Asp Thr
      65          70          75          80
Gln Gln Gln Met Ala Pro Asp Cys Arg Glu Ile Phe Ala Thr Glu Leu
      85          90          95
Arg Asp Ile Cys Asp Asp Val Leu Ser Leu Leu Glu Lys Leu Leu Ile
      100         105         110
Pro Asn Ala Ser His Ala Xaa Ser Leu Val Tyr Tyr Leu His Met Ile
      115         120         125
Gly Asp Tyr Tyr Arg Tyr Trp Leu
      130         135         136

```

```
<210> 1405
<211> 110
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(110)
<223> X = any amino acid or stop code
```

MISSING AT THE TIME OF PUBLICATION

Gly Asn Asp Tyr Ser Leu Gly Leu Thr Pro Thr Gly Val Leu Val Phe
 85 90 95
 Glu Gly Asp Thr Lys Ile Gly Leu Phe Phe Trp Pro Lys Ile Thr Arg
 100 105 110
 Leu Asp Phe Lys Lys Asn Lys Leu Thr Leu Val Val Val Glu Asp Asp
 115 120 125
 Asp Gln Gly Lys Glu Gln Glu His Thr Phe Val Phe Arg Leu Asp His
 130 135 140
 Pro Lys Ala Cys Lys His Leu Trp Lys Cys Ala Val Glu His His A
 145 150 155 160
 Phe Phe Arg Leu Arg Gly Pro Val Gln Lys Ser Ser His Arg Ser Gly
 165 170 175
 Phe Ile Arg Leu Gly Ser Arg Phe Arg Tyr Ser Gly Lys Thr Glu Tyr
 180 185 190
 Gln Thr Thr Lys Thr Asn Lys Ala Arg Arg Ser Thr Ser Phe Glu Arg
 195 200 205
 Arg Pro Ser Lys Arg Tyr Ser Arg Arg Arg Thr Leu Gln Met Lys Ala Cys
 210 215 220
 Ala Thr Lys Pro Glu Glu Leu Ser Val His Asn Asn Val Ser Thr Gln
 225 230 235 240
 Ser Asn Gly Ser Gln Gln Ala Trp Gly Met Arg Ser Ala Leu Pro Val
 245 250 255
 Ser Pro Ser Ile Ser Ser Ala Pro Val Pro Val Glu Ile Glu Asn Leu
 260 265 270
 Pro Gln Ser Pro Gly Thr Asp Gln His Asp Arg Lys Trp Leu Ser Ala
 275 280 285
 Ala Ser Asp Cys Cys Gln Arg Gly Gly Asn Gln Trp Asn Thr Arg Ala
 290 295 300
 Leu
 305

```

<210> 1408
<211> 92
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(92)
<223> X = any amino acid or stop code

```

<400> 1408
Ala Thr Ala Pro Gly Leu Phe Asn Phe Phe Xaa Phe Leu Phe Gln Cys
 1 5 10 15
 Arg Glu Glu His Lys Lys Lys Asn Pro Glu Val Pro Val Asn Phe Ala
 20 25 30
 Glu Phe Ser Lys Lys Cys Ser Gly Arg Trp Lys Thr Met Ser Ser Lys
 35 40 45
 Glu Lys Phe Lys Phe Gly Glu Met Ala Lys Ala Asp Glu Val Cys Tyr
 50 55 60
 Asp Arg Glu Met Lys Asp Tyr Gly Pro Ala Lys Gly Gly Lys Lys Lys
 65 70 75 80
 Asp Pro Asn Ala Pro Lys Arg Pro Pro Ser Gly Phe
 85 90 92

```

<210> 1409
<211> 169
<212>Amino acid

```

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(169)

<223> X = any amino acid or stop code

<400> 1409

| | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ala | Glu | Gly | Leu | Gly | Ser | Trp | Ala | Val | Trp | Ala | Gly | Leu | Gly | Trp | Ala | |
| 1 | | | | | | | | | | | | | | | 15 | |
| Gly | Arg | His | Met | Met | Glu | Ala | Gly | Gly | Ala | Thr | Gly | Ala | Leu | Gly | Val | Gly |
| | | | | | | | | | | | | | | | 20 | |
| Ser | Lys | Leu | Pro | Ser | Ala | Phe | Cys | Phe | Pro | Gly | Ser | Ser | Val | Ala | Met | |
| | | | | | | | | | | | | | | | 35 | |
| Asp | Met | Phe | Gln | Lys | Val | Glu | Lys | Ile | Gly | Glu | Gly | Thr | Tyr | Gly | Val | |
| | | | | | | | | | | | | | | | 50 | |
| Val | Tyr | Lys | Ala | Lys | Asn | Arg | Glu | Thr | Gly | Gln | Leu | Val | Ala | Leu | Lys | |
| | | | | | | | | | | | | | | | 65 | |
| Lys | Ile | Arg | Leu | Asp | Leu | Xaa | Val | Leu | Gly | Arg | Pro | Leu | Ser | Tyr | Pro | |
| | | | | | | | | | | | | | | | 85 | |
| Pro | Trp | Ala | Ile | Ile | Thr | Trp | Ala | Leu | Pro | Asp | Pro | Phe | Pro | Leu | Ser | |
| | | | | | | | | | | | | | | | 100 | |
| Trp | Ser | Pro | Arg | Leu | Thr | Pro | Leu | Gly | Ala | Ala | Gln | Gln | Pro | Leu | Pro | |
| | | | | | | | | | | | | | | | 115 | |
| Val | Leu | Ser | Pro | Val | His | Cys | Leu | Leu | Thr | Ser | Leu | Cys | Arg | Gly | Pro | |
| | | | | | | | | | | | | | | | 130 | |
| Asp | Cys | Gly | Val | Trp | Trp | Met | Thr | Cys | Gln | Gly | Ala | Gln | Val | Ser | Ile | |
| | | | | | | | | | | | | | | | 145 | |
| Ala | Gly | Ala | Leu | Vla | Ile | Leu | Trp | Gly | | | | | | | 155 | |
| | | | | | | | | | | | | | | | 165 | |
| | | | | | | | | | | | | | | | 169 | |

<210> 1410

<211> 146

<212>Amino acid

<213> Homo sapiens

<400> 1410

| | | | | | | | | | | | | | | | | |
|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Cys | Val | Ser | Val | Leu | Cys | Ser | Phe | Ser | Tyr | Leu | Gln | Asn | Gly | Trp | |
| 1 | | | | | | | | | | | | | | | 15 | |
| Thr | Ala | Ser | Asp | Pro | Val | His | Gly | Tyr | Trp | Phe | Arg | Ala | Gly | Asp | His | |
| | | | | | | | | | | | | | | | 20 | |
| Val | .Ser | Arg | Asn | Ile | Pro | Val | Ala | Thr | Asn | Asn | Pro | Val | Arg | Ala | Val | |
| | | | | | | | | | | | | | | | 35 | |
| Gln | Glu | Glu | Thr | Arg | Asp | Arg | Arg | Phe | His | Leu | Leu | Gly | Asp | Pro | Gln | Asn |
| | | | | | | | | | | | | | | | 50 | |
| Lys | Asp | Cys | Thr | Leu | Ser | Ile | Arg | Asp | Thr | Arg | Glu | Ser | Asp | Ala | Gly | |
| | | | | | | | | | | | | | | | 65 | |
| Thr | Tyr | Val | Phe | Cys | Val | Glu | Arg | Gly | Asn | Met | Lys | Trp | Asn | Tyr | Lys | |
| | | | | | | | | | | | | | | | 85 | |
| Tyr | Asp | Gln | Leu | Ser | Val | Asn | Val | Thr | Ala | Ser | Gln | Asp | Leu | Leu | Ser | |
| | | | | | | | | | | | | | | | 100 | |
| Arg | Tyr | Arg | Leu | Glu | Val | Pro | Glu | Ser | Val | Thr | Val | Gln | Glu | Gly | Leu | |
| | | | | | | | | | | | | | | | 115 | |
| Cys | Val | Ser | Val | Pro | Trp | Gln | Cys | Pro | Leu | Pro | Pro | Leu | Gln | Leu | Asp | |
| | | | | | | | | | | | | | | | 130 | |
| | | | | | | | | | | | | | | | 135 | |
| | | | | | | | | | | | | | | | 140 | |

Cys Leu
145 146

```
<210> 1411
<211> 250
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(250)
<223> X = any amino acid or stop code
```

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gln | Leu | Gln | Leu | Cys | Gln | Asn | Cys | Thr | Lys | Arg | Gly | Glu | Cys | His | Cys |
| 1 | | | | 5 | | | | 10 | | | | | 15 | | |
| Val | Pro | Phe | Asp | Thr | Tyr | Ile | Lys | Thr | Lys | Lys | Glu | Lys | Lys | Arg | Leu |
| | | | | 20 | | | 25 | | | | | 30 | | | |
| Ser | Val | Leu | Pro | Pro | Thr | Arg | Leu | Met | Glu | Ala | Arg | Phe | Ser | Pro | Ile |
| | | | | 35 | | | 40 | | | | 45 | | | | |
| Asn | Gln | Ile | Leu | Pro | Trp | Cys | Arg | Gln | Asp | Leu | Ala | Ile | Ser | Ile | Ser |
| | 50 | | | | | 55 | | | 60 | | | | | | |
| Lys | Ala | Ile | Asn | Thr | Gln | Glu | Ala | Pro | Val | Lys | Glu | Lys | His | Ala | Arg |
| | 65 | | | | 70 | | | | 75 | | | 80 | | | |
| Arg | Ile | Ile | Leu | Gly | Thr | His | His | Glu | Lys | Gly | Ala | Phe | Thr | Phe | Trp |
| | | | | 85 | | | | 90 | | | | 95 | | | |
| Ser | Tyr | Ala | Ile | Gly | Leu | Pro | Leu | Pro | Ser | Ser | Ser | Ile | Leu | Ser | Trp |
| | | 100 | | | | 105 | | | 110 | | | | | | |
| Lys | Phe | Cys | His | Val | Leu | His | Lys | Val | Leu | Arg | Asp | Gly | His | Pro | Asn |
| | | 115 | | | | 120 | | | 125 | | | | | | |
| Val | Leu | His | Asp | Cys | Gln | Arg | Tyr | Arg | Ser | Asn | Ile | Arg | Glu | Ile | Gly |
| | 130 | | | | 135 | | | | 140 | | | | | | |
| Asp | Leu | Trp | Gly | His | Leu | His | Asp | Arg | Tyr | Gly | Gln | Leu | Val | Asn | Val |
| | 145 | | | | 150 | | | | 155 | | | 160 | | | |
| Tyr | Thr | Lys | Leu | Leu | Leu | Thr | Lys | Ile | Ser | Phe | His | Leu | Lys | His | Pro |
| | | | | | 165 | | | | 170 | | | 175 | | | |
| Gln | Phe | Pro | Ala | Gly | Leu | Glu | Val | Thr | Asp | Glu | Val | Leu | Glu | Lys | Ala |
| | 180 | | | | 185 | | | | | 190 | | | | | |
| Ala | Gly | Thr | Asp | Val | Asn | Asn | Xaa | Val | Thr | Leu | His | Gly | Tyr | Met | |
| | 195 | | | | 200 | | | 205 | | | | | | | |
| Ala | Ser | Ser | Pro | Arg | Leu | Pro | His | Ser | Phe | Leu | Pro | Arg | Leu | Thr | Pro |
| | 210 | | | | 215 | | | 220 | | | | | | | |
| Arg | Arg | Pro | His | Gly | Ala | Val | Gly | Leu | Asn | Glu | Ser | Val | Ala | Leu | Leu |
| | 225 | | | | 230 | | | | 235 | | | 240 | | | |
| Val | Asp | Ala | His | Ala | Pro | Arg | Asp | Arg | Gly | | | | | | |
| | | | | 245. | | | | 250 | | | | | | | |

```
<210> 1412
<211> 169
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(169)
<223> X = any amino acid or stop code
```

<400> 1412
 Ala Ala Pro His Arg Met Pro Arg Ala Pro His Phe Met Pro Leu Leu
 1 5 10 15
 Leu Leu Leu Leu Leu Ser Leu Pro His Thr Gln Ala Ala Phe Pro
 20 25 30
 Gln Asp Pro Leu Pro Leu Leu Ile Ser Asp Leu Gln Gly Thr Ser Pro
 35 40 45
 Leu Ser Trp Leu Pro Ser Leu Glu Asp Asp Ala Val Ala Ala Xaa Leu
 50 55 60
 Gly Leu Asp Phe Gln Arg Phe Leu Thr Leu Asn Arg Thr Leu Leu Val
 65 70 75 80
 Ala Ala Arg Asp His Val Phe Ser Phe Asp Leu Gln Ala Glu Glu Glu
 85 90 95
 Gly Glu Gly Leu Val Pro Asn Lys Tyr Leu Thr Trp Arg Ser Gln Asp
 100 105 110
 Val Glu Asn Cys Ala Val Arg Xaa Lys Leu Thr Leu Asn Arg Thr Leu
 115 120 125
 Leu Val Ala Ala Arg Asp His Val Phe Ser Phe Asp Leu Gln Ala Glu
 130 135 140
 Glu Glu Gly Leu Val Pro Asn Lys Tyr Leu Thr Trp Arg Ser
 145 150 155 160
 Gln Asp Val Glu Asn Cys Ala Val Arg
 165 169

<210> 1413
<211> 131
<212> Amino acid
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(131)
<223> X = any amino acid or stop code

<400> 1413
 His Leu Val Pro Lys Thr Arg Gly Arg Gly Thr Pro Ser Gly Asp Gln
 1 5 10 15
 Ser Pro Val Leu Thr Leu Thr Pro Xaa Gly Asp Pro Pro Thr Ile Leu
 20 25 30
 Gly Pro Gln Thr Asn Gln Pro Lys Glu His Leu Thr Asn Phe Lys Ser
 35 40 45
 Gly Lys Arg Ser Phe His Ser Leu Leu Gln Pro Leu Leu Leu Leu
 50 55 60
 His Pro Ser Ile Ser Pro Phe Leu Asn Phe Gly Ser Phe Pro Phe Leu
 65 70 75 80
 Val Glu Thr Glu Glu Thr Cys Phe Ile His Lys Leu Lys Thr Pro Ala
 85 90 95
 Leu Val Thr Pro Asp Ser Leu Pro Leu Val Phe Asn His Cys Gly Asp
 100 105 110
 Ala Cys Leu Ile Ile His Pro His Phe Arg Asp Val Glu Phe His His
 115 120 125
 Thr Gly Asn
 130 131

<210> 1414

<211> 365
<212>Amino acid
<213> Homo sapiens

<400> 1414
Cys Cys Ser Thr Lys Asn Ile Ser Gly Asp Lys Ala Cys Asn Leu Met
1 5 10 15
Ile Phe Asp Thr Arg Lys Thr Ala Arg Gln Pro Asn Cys Tyr Leu Phe
20 25 30
Phe Cys Pro Asn Glu Ala Cys Pro Leu Lys Pro Ala Lys Gly Leu
35 40 45
Met Ser Tyr Arg Ile Ile Thr Asp Phe Pro Ser Leu Thr Arg Asn Leu
50 55 60
Pro Ser Gln Glu Leu Pro Gln Glu Asp Ser Leu Leu His Gly Gln Phe
65 70 75 80
Ser Gln Ala Val Thr Pro Leu Ala His His His Thr Asp Tyr Ser Lys
85 90 95
Pro Thr Asp Ile Ser Trp Arg Asp Thr Leu Ser Gln Lys Phe Gly Ser
100 105 110
Ser Asp His Leu Glu Lys Leu Phe Lys Met Asp Glu Ala Ser Ala Gln
115 120 125
Leu Leu Ala Tyr Lys Glu Lys Gly His Ser Gln Ser Ser Gln Phe Ser
130 135 140
Ser Asp Gln Glu Ile Ala His Leu Leu Pro Glu Asn Val Ser Ala Leu
145 150 155 160
Pro Ala Thr Val Ala Val Ala Ser Pro His Thr Thr Ser Ala Thr Pro
165 170 175
Lys Pro Ala Thr Leu Leu Pro Thr Asn Ala Ser Val Thr Pro Ser Gly
180 185 190
Thr Ser Gln Pro Gln Leu Ala Thr Thr Ala Pro Pro Val Thr Thr Val
195 200 205
Thr Ser Gln Pro Pro Thr Thr Leu Ile Ser Thr Val Phe Thr Arg Ala
210 215 220
Ala Ala Thr Leu Gln Ala Met Ala Thr Thr Ala Val Leu Thr Thr Thr
225 230 235 240
Phe Gln Ala Pro Thr Asp Ser Lys Gly Ser Leu Glu Thr Ile Pro Phe
245 250 255
Thr Glu Ile Ser Asn Leu Thr Leu Asn Thr Gly Asn Val Tyr Asn Pro
260 265 270
Thr Ala Leu Ser Met Ser Asn Val Glu Ser Ser Thr Met Asn Lys Thr
275 280 285
Ala Ser Trp Glu Gly Arg Glu Ala Ser Pro Gly Ser Ser Ser Gln Gly
290 295 300
Ser Val Pro Glu Asn Gln Tyr Gly Leu Pro Phe Glu Lys Trp Leu Leu
305 310 315 320
Ile Gly Ser Leu Leu Phe Gly Val Leu Phe Leu Val Ile Gly Leu Val
325 330 335
Leu Leu Gly Arg Ile Leu Ser Glu Ser Leu Arg Arg Lys Arg Tyr Ser
340 345 350
Arg Leu Asp Tyr Leu Ile Asn Gly Ile Tyr Val Asp Ile
355 360 365

<210> 1415
<211> 148
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature

<222> (1)...(148)
 <223> X = any amino acid or stop code

<400> 1415
 Ile Phe Ala Gly Ser Gly Val Met Arg Leu Lys Ile Ser Leu Leu Lys
 1 5 10 15
 Glu Pro Lys His Gln Glu Leu Val Ser Cys Val Gly Trp Thr Thr Ala
 20 25 30
 Glu Glu Leu Tyr Ser Cys Ser Asp Asp His His Ile Val Lys Trp Asn
 35 40 45
 Leu Leu Thr Ser Glu Thr Thr Gln Ile Val Lys Leu Pro Asp Asp Ile
 50 55 60
 Tyr Pro Ile Asp Phe His Trp Phe Pro Lys Ser Leu Gly Val Lys Lys
 65 70 75 80
 Gln Thr His Ala Glu Ser Phe Val Ile Thr Ser Ser Asp Gly Lys Phe
 85 90 95
 His Leu Ile Ser Lys Leu Gly Arg Val Glu Lys Ser Val Glu Ala His
 100 105 110
 Cys Gly Ala Val Leu Ala Gly Arg Trp Asn Tyr Glu Gly Thr Ala Leu
 115 120 125
 Val Thr Val Gly Glu Asp Gly Gln Ile Xaa Ile Trp Ser Lys Thr Gly
 130 135 140
 Met Leu Ile Ser
 145 148

<210> 1416
 <211> 122
 <212> Amino acid
 <213> Homo sapiens

 <220>
 <221> misc_feature
 <222> (1)...(122)
 <223> X = any amino acid or stop code

<400> 1416
 Ala Arg Ala Thr Thr Lys Arg His Phe Ile Leu Leu Phe Leu Phe Phe
 1 5 10 15
 Leu Arg Arg Cys Leu Phe Leu Ser Pro Arg Met Glu Cys Asn Gly Ala
 20 25 30
 Ile Leu Ala His Cys Asn Leu His Leu Pro Gly Ser Ser Ser Ser
 35 40 45
 Ala Ser Ala Ser Xaa Val Ala Gly Ile Thr Asp Val Arg His His Ala
 50 55 60
 Gln Leu Ile Leu Phe Val Phe Leu Val Glu Thr Gly Phe His Arg Val
 65 70 75 80
 Gly Gln Ala Gly Leu Lys Leu Leu Thr Ser Gly Asp Leu Leu Thr Ser
 85 90 95
 Ala Ser Gln Ser Ala Gly Ile Ile Met Gly Ile Ser His Cys Ala Gln
 100 105 110
 Pro Lys Lys Ala Phe Xaa Thr Lys Thr Phe
 115 120 122

<210> 1417

<211> 138
 <212> Amino acid
 <213> Homo sapiens

 <220>
 <221> misc_feature
 <222> (1)...(138)
 <223> X = any amino acid or stop code

<400> 1417
 Glu Ala Gly Ser Asn Asp Asp Leu Ala Thr Xaa Lys Thr Cys Gly Arg
 1 5 10 15
 Ala Arg Pro Ser Ser Arg Ser Arg Gln Phe Gly Ser Arg Val Trp Asn
 20 25 30
 His Arg Gln Gly Val Arg Ser Ser Pro Gly Glu Gly Ala Gly Ser Arg
 35 40 45
 Ser Pro Cys Arg Arg Arg His Arg Arg Lys His Arg Arg Asn Val Gln
 50 55 60
 Ser Pro Xaa Arg Arg Arg Ser Arg Ser Cys Ser Arg Arg Ser Gly Arg
 65 70 75 80
 Cys Ser Val Ala Leu Leu Gly Ala Cys Pro Val Ala Gly His Ser Arg
 85 90 95
 Gly Lys Val Val Cys Arg Arg Ala His Ala Ile Thr Gln Arg Arg Arg
 100 105 110
 Cys Cys Gly Phe Asp Pro Met Val His Pro Lys Glu His Arg Gly Xaa
 115 120 125
 Arg Glu Arg Ser Arg Lys Trp Ser Arg Ser
 130 135 138

<210> 1418
 <211> 92
 <212> Amino acid
 <213> Homo sapiens

 <220>
 <221> misc_feature
 <222> (1)...(92)
 <223> X = any amino acid or stop code

<400> 1418
 Ala Thr Ala Pro Gly Leu Phe Asn Phe Phe Xaa Phe Leu Phe Gln Cys
 1 5 10 15
 Arg Glu Glu His Lys Lys Lys Asn Pro Glu Val Pro Val Asn Phe Ala
 20 25 30
 Glu Phe Ser Lys Lys Cys Ser Gly Arg Trp Lys Thr Met Ser Ser Lys
 35 40 45
 Glu Lys Phe Lys Phe Gly Glu Met Ala Lys Ala Asp Glu Val Cys Tyr
 50 55 60
 Asp Arg Glu Met Lys Asp Tyr Gly Pro Ala Lys Gly Gly Lys Lys Lys
 65 70 75 80
 Asp Pro Asn Ala Pro Lys Arg Pro Pro Ser Gly Phe
 85 90 92

<210> 1419

<211> 44
<212>Amino acid
<213> Homo sapiens

<400> 1419
Leu Thr Val Asn Tyr Val Leu Val Phe Ser Arg Asp Ser Gly Leu Arg
1 5 10 15
Ala Ile Glu Asn Leu Met Gln Lys Lys Gly Lys Phe Asp Tyr Ile Leu
20 25 30
Leu Glu Thr Thr Gly Leu Ala Asp Pro Gly Lys Lys
35 40 44

<210> 1420
<211> 91
<212>Amino acid
<213> Homo sapiens

<400> 1420
His Glu Ala Ala Leu Cys Arg Thr Arg Ala Val Ala Ala Glu Arg His
1 5 10 15
Phe Leu Arg Val Phe Leu Phe Phe Arg Pro Phe Arg Gly Val Gly Thr
20 25 30
Glu Ser Gly Ser Glu Ser Gly Ser Ser Lys Ala Lys Glu Pro Arg Thr
35 40 45
Pro Ser Ser Ser Tyr Gly Thr Ala Gln Tyr Arg Arg Trp Pro Ile Ala
50 55 60
Gln Glu Tyr Lys His Cys Thr Ala His Asn Asp Thr Gly Thr Leu Cys
65 70 75 80
Ser Glu Leu Arg Glu Pro Trp Arg Arg Pro Gln
85 90 91

<210> 1421
<211> 190
<212>Amino acid
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(190)
<223> X = any amino acid or stop code

<400> 1421
Glu Gly Ser Ser Gln Ala Asn Thr Leu Arg Ser Arg Lys Glu Asn Arg
1 5 10 15
Asn Asn Leu Leu Ala Cys Leu Glu Ser His Val Leu Arg Xaa Gln Phe
20 25 30
Thr Glu Ser His Leu Cys Ser Leu Met Gly Asp Asn Pro Phe Gln Pro
35 40 45
Lys Ser Asn Ser Lys Met Ala Glu Leu Phe Met Glu Cys Glu Glu Glu
50 55 60

Glu Leu Glu Pro Trp Gln Lys Lys Val Lys Glu Val Glu Asp Asp Asp
 65 70 75 80
 Asp Asp Glu Pro Ile Phe Val Gly Glu Ile Ser Ser Ser Lys Pro Ala
 85 80 95
 Ile Ser Asn Ile Leu Asn Arg Val Asn Pro Ser Ser Tyr Ser Arg Gly
 100 105 110
 Leu Lys Asn Gly Ala Leu Ser Arg Gly Ile Thr Ala Ala Phe Lys Pro
 115 120 125
 Thr Ser Gln His Tyr Thr Asn Pro Thr Ser Asn Pro Val Pro Ala Ser
 130 135 140
 Pro Ile Asn Phe His Pro Glu Ser Arg Ser Ser Asp Ser Ser Val Ile
 145 150 155 160
 Gly Gln Pro Phe Ser Lys Pro Val Ser Val Ser Lys Thr Ile Arg Pro
 165 170 175
 Ala Gln Gly Ser Ile Gly Cys Cys Leu Ser Ile Ser Thr Val
 180 185 190

<210> 1422
<211> 207
<212>Amino acid
<213> Homo sapiens

<400> 1422
Cys Phe Ser Leu Glu Asp Ile Leu Asn Phe Phe Leu Gln Gly Phe Ser
 1 5 10 15
 Ala Gly Leu Phe Ala Phe Tyr His Asp Lys Asp Gly Asn Pro Leu Thr
 20 25 30
 Ser Arg Phe Ala Asp Gly Leu Pro Pro Phe Asn Tyr Ser Leu Gly Leu
 35 40 45
 Tyr Gln Trp Ser Asp Lys Val Val Arg Lys Val Glu Arg Leu Trp Asp
 50 55 60
 Val Arg Asp Asn Lys Ile Val Arg His Thr Val Tyr Leu Leu Val Thr
 65 70 75 80
 Pro Arg Val Val Glu Glu Ala Arg Lys His Phe Asp Cys Pro Val Leu
 85 90 95
 Glu Gly Met Glu Leu Glu Asn Gln Gly Gly Val Gly Thr Glu Leu Asn
 100 105 110
 His Trp Glu Lys Arg Leu Leu Glu Asn Glu Ala Met Thr Gly Ser His
 115 120 125
 Thr Gln Asn Arg Val Leu Ser Arg Ile Thr Leu Ala Leu Met Glu Asp
 130 135 140
 Thr Gly Arg Gln Met Leu Ser Pro Tyr Cys Asp Thr Leu Arg Ser Asn
 145 150 155 160
 Pro Leu Gln Leu Thr Cys Arg Gln Asp Gln Arg Ala Val Ala Val Cys
 165 170 175
 Asn Leu Gln Lys Phe Pro Lys Pro Leu Pro Gln Glu Tyr Gln Tyr Phe
 180 185 190
 Asp Glu Leu Ser Gln Ile Pro Ala Glu Asp Leu Pro Tyr Tyr Gly
 195 200 205 207

<210> 1423
<211> 423
<212>Amino acid
<213> Homo sapiens

<400> 1423
 Ala Ala Arg Arg Arg Gln Leu Val Ser Arg Arg Arg Thr Ala Glu
 1 5 10 15
 Tyr Pro Arg Arg Arg Arg Ser Ser Pro Ser Ala Arg Pro Pro Asp Val
 20 25 30
 Pro Gly Gln Pro Lys Ala Ala Lys Ser Pro Ser Pro Val Gln Gly
 35 40 45
 Lys Lys Ser Pro Arg Leu Leu Cys Ile Glu Lys Val Thr Thr Asp Lys
 50 55 60
 Asp Pro Lys Glu Glu Lys Glu Glu Glu Asp Asp Ser Ala Leu Pro Gln
 65 70 75 80
 Glu Val Ser Ile Ala Ala Ser Arg Pro Ser Arg Gly Trp Arg Ser Ser
 85 90 95
 Arg Thr Ser Val Ser Arg His Arg Asp Thr Glu Asn Thr Arg Ser Ser
 100 105 110
 Arg Ser Lys Thr Gly Ser Leu Glu Ile Cys Lys Ser Glu Pro Asn
 115 120 125
 Thr Asp Gln Leu Asp Tyr Asp Val Gly Glu Glu His Gln Ser Pro Gly
 130 135 140
 Gly Ile Ser Ser Glu Glu Glu Glu Glu Glu Glu Met Leu Ile
 145 150 155 160
 Ser Glu Glu Glu Ile Pro Phe Lys Asp Asp Pro Arg Asp Glu Thr Tyr
 165 170 175
 Lys Pro His Leu Glu Arg Glu Thr Pro Lys Pro Arg Arg Lys Ser Gly
 180 185 190
 Lys Val Lys Glu Glu Lys Lys Glu Ile Lys Val Glu Val Glu
 195 200 205
 Val Glu Val Lys Glu Glu Glu Asn Glu Ile Arg Glu Asp Glu Glu Pro
 210 215 220
 Pro Arg Lys Arg Gly Arg Arg Lys Asp Asp Lys Ser Pro Arg Leu
 225 230 235 240
 Pro Lys Arg Arg Lys Lys Pro Pro Ile Gln Tyr Val Arg Cys Glu Met
 245 250 255
 Glu Gly Cys Gly Thr Val Leu Ala His Pro Arg Tyr Leu Gln His His
 260 265 270
 Ile Lys Tyr Gln His Leu Leu Lys Lys Tyr Val Cys Pro His Pro
 275 280 285
 Ser Cys Gly Arg Leu Phe Arg Leu Gln Lys Gln Leu Leu Arg His Ala
 290 295 300
 Lys His His Thr Asp Gln Arg Asp Tyr Ile Cys Glu Tyr Cys Ala Arg
 305 310 315 320
 Ala Phe Lys Ser Ser His Asn Leu Ala Val His Arg Met Ile His Thr
 325 330 335
 Gly Glu Lys Pro Leu Gln Cys Glu Ile Cys Gly Phe Thr Cys Arg Gln
 340 345 350
 Lys Ala Ser Leu Asn Trp His Met Lys Lys His Asp Ala Asp Ser Phe
 355 360 365
 Tyr Gln Phe Ser Cys Asn Ile Cys Gly Lys Lys Phe Glu Lys Lys Asp
 370 375 380
 Ser Val Val Ala His Lys Ala Lys Ser His Pro Glu Val Leu Ile Ala
 385 390 395 400
 Glu Ala Leu Ala Ala Asn Ala Gly Ala Leu Ile Thr Ser Thr Asp Ile
 405 410 415
 Leu Gly Thr Asn Pro Glu Ser
 420 423

<210> 1424
<211> 158
<212>Amino acid
<213> Homo sapiens

<400> 1424
 Met Thr Ala Asn Arg Leu Ala Glu Ser Leu Leu Ala Leu Ser Gln Gln
 1 5 10 15
 Glu Glu Leu Ala Asp Leu Pro Lys Asp Tyr Leu Leu Ser Glu Ser Glu
 20 25 30
 Asp Glu Gly Asp Asn Asp Gly Glu Arg Lys His Gln Lys Leu Leu Glu
 35 40 45
 Ala Ile Ser Ser Leu Asp Gly Lys Asn Arg Arg Lys Leu Ala Glu Arg
 50 55 60
 Ser Glu Ala Ser Leu Lys Val Ser Glu Phe Asn Val Ser Ser Glu Gly
 65 70 75 80
 Ser Gly Glu Lys Leu Val Leu Ala Asp Leu Leu Glu Pro Val Lys Thr
 85 90 95
 Ser Ser Ser Leu Ala Thr Val Lys Lys Gln Leu Ser Arg Val Lys Ser
 100 105 110
 Lys Lys Thr Val Glu Leu Pro Leu Asn Lys Glu Glu Ile Glu Arg Ile
 115 120 125
 His Arg Glu Val Ala Phe Asn Lys Thr Ala Gln Val Leu Ser Lys Trp
 130 135 140
 Asp Pro Val Val Leu Lys Asn Arg Gln Ala Glu Gln Leu *
 145 150 155 157

<210> 1425
<211> 286
<212> Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(286)
<223> X = any amino acid or stop code

<400> 1425
 Arg Ile Asp Phe Met Phe His Ser Ser Ala Met Val Asn Ser His Arg
 1 5 10 15
 Lys Pro Met Phe Asn Ile His Arg Gly Phe Tyr Cys Leu Thr Ala Ile
 20 25 30
 Leu Pro Gln Ile Cys Ile Cys Ser Gln Phe Ser Val Pro Ser Ser Tyr
 35 40 45
 His Phe Thr Glu Asp Pro Gly Ala Phe Pro Val Ala Thr Asn Gly Glu
 50 55 60
 Arg Phe Pro Trp Gln Glu Arg Leu Pro Ser Val Val Ile Pro Leu
 65 70 75 80
 His Tyr Asp Leu Phe Val His Pro Asn Leu Thr Ser Leu Asp Phe Val
 85 90 95
 Ala Ser Glu Ile Glu Val Leu Val Ser Asn Ala Thr Gln Leu Ile
 100 105 110
 Ile Leu His Ser Lys Asp Leu Glu Ile Thr Asn Ala Thr Leu Gln Ser
 115 120 125
 Glu Glu Asp Ser Arg Tyr Met Lys Pro Gly Lys Glu Leu Lys Val Leu
 130 135 140
 Ser Tyr Pro Ala His Glu Gln Ile Ala Leu Leu Val Pro Glu Lys Leu
 145 150 155 160
 Thr Pro His Leu Lys Tyr Tyr Val Ala Met Asp Phe Gln Ala Lys Leu
 165 170 175
 Gly Asp Gly Phe Glu Gly Phe Tyr Lys Ser Thr Tyr Arg Thr Leu Gly

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gly | | 180 | | 185 | | 190 | | | | | | | | | |
| Glu | Thr | Arg | Ile | Leu | Ala | Val | Thr | Asp | Phe | Glu | Pro | Thr | Gln | Ala | |
| | | | 195 | | 200 | | | | | | | 205 | | | |
| Arg | Met | Ala | Phe | Pro | Cys | Phe | Asp | Glu | Pro | Leu | Phe | Lys | Ala | Asn | Phe |
| | | | 210 | | 215 | | | | | | | 220 | | | |
| Ser | Ile | Lys | Ile | Arg | Arg | Glu | Ser | Arg | His | Ile | Ala | Leu | Ser | Asn | Met |
| | | | 225 | | 230 | | | | | | 235 | | | 240 | |
| Pro | Lys | Val | Lys | Thr | Ile | Glu | Leu | Glu | Gly | Gly | Leu | Leu | Glu | Asp | His |
| | | | 245 | | 250 | | | | | | 250 | | | 255 | |
| Phe | Glu | Thr | Thr | Val | Lys | Met | Ser | Thr | Tyr | Leu | Val | Ala | Tyr | Ile | Asp |
| | | | 260 | | 265 | | | | | | 265 | | | 270 | |
| Leu | Xaa | Phe | Pro | Leu | Met | Gly | Asn | Asp | Phe | Gly | Arg | Ser | | | |
| | | | 275 | | 280 | | | | | | 285 | 286 | | | |

<210> 1426
<211> 224
<212>Amino acid
<213> Homo sapiens

| | | | | | | | | | | | | | | | |
|-----|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | <400> 1426 | | | | | | | | | | | | | | |
| Arg | Ser | Lys | Ile | Pro | Arg | Ser | Asp | Pro | Arg | Val | Arg | Thr | Pro | Ala | Pro |
| 1 | | | | 5 | | | | 10 | | | | 15 | | | |
| Ala | Glu | Ala | Glu | Gln | Gly | Lys | Ser | Gln | Cys | Pro | Ser | Gly | Ser | Thr | Ala |
| | | | | 20 | | | | 25 | | | | 30 | | | |
| Gln | Ser | Trp | Ser | Ala | Met | Asp | Ile | Leu | Val | Pro | Leu | Leu | Gln | Leu | Leu |
| | | | 35 | | 40 | | | | | | 45 | | | | |
| Val | Leu | Leu | Leu | Thr | Leu | Pro | Leu | His | Leu | Met | Ala | Leu | Leu | Gly | Cys |
| | | | 50 | | 55 | | | | | | 60 | | | | |
| Trp | Gln | Pro | Leu | Cys | Lys | Ser | Tyr | Phe | Pro | Tyr | Leu | Met | Ala | Val | Leu |
| | | | 55 | | 70 | | | | | | 75 | | | 80 | |
| Thr | Pro | Lys | Ser | Asn | Arg | Lys | Met | Glu | Ser | Lys | Lys | Arg | Glu | Leu | Phe |
| | | | 85 | | 90 | | | | | | 95 | | | | |
| Ser | Gln | Ile | Lys | Gly | Leu | Thr | Gly | Ala | Ser | Gly | Lys | Val | Ala | Leu | Leu |
| | | | 100 | | 105 | | | | | | 110 | | | | |
| Glu | Leu | Gly | Cys | Gly | Thr | Gly | Ala | Asn | Phe | Gln | Phe | Tyr | Pro | Pro | Gly |
| | | | 115 | | 120 | | | | | | 125 | | | | |
| Cys | Arg | Val | Thr | Cys | Leu | Asp | Pro | Asn | Pro | His | Phe | Glu | Lys | Phe | Leu |
| | | | 130 | | 135 | | | | | | 140 | | | | |
| Thr | Lys | Ser | Met | Ala | Glu | Asn | Arg | His | Leu | Gln | Tyr | Glu | Arg | Phe | Val |
| | | | 145 | | 150 | | | | | | 155 | | | 160 | |
| Val | Ala | Pro | Gly | Glu | Asp | Met | Arg | Gln | Leu | Ala | Asp | Gly | Ser | Met | Asp |
| | | | 165 | | 170 | | | | | | 170 | | | 175 | |
| Val | Val | Val | Cys | Thr | Leu | Val | Leu | Cys | Ser | Val | Gln | Ser | Pro | Arg | Lys |
| | | | 180 | | 185 | | | | | | 190 | | | | |
| Val | Leu | Gln | Glu | Val | Arg | Arg | Val | Leu | Arg | Pro | Gly | Gly | Val | Leu | Phe |
| | | | 195 | | 200 | | | | | | 205 | | | | |
| Phe | Trp | Glu | His | Val | Ala | Glu | Pro | Tyr | Gly | Ser | Trp | Ala | Phe | Met | Trp |
| | | | 210 | | 215 | | | | | | 220 | | | 224 | |

<210> 1427
<211> 133
<212>Amino acid
<213> Homo sapiens

<400> 1427

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Arg | Leu | Gln | Asn | Ser | Ser | Leu | Met | Asp | Pro | Lys | Leu | Gly | Arg | Met | Ala |
| 1 | | | | | | | 5 | | | 10 | | | 15 | | |
| Ala | Ser | Leu | Leu | Ala | Val | Leu | Leu | Leu | Leu | Leu | Glu | Arg | Gly | Met | |
| | | | | | | | 20 | | | 25 | | | 30 | | |
| Phe | Ser | Ser | Pro | Ser | Pro | Pro | Pro | Ala | Leu | Leu | Glu | Lys | Val | Phe | Gln |
| | | | | | | | 35 | | | 40 | | | 45 | | |
| Tyr | Ile | Asp | Leu | His | Gln | Asp | Glu | Phe | Val | Gln | Thr | Leu | Lys | Glu | Trp |
| | | | | | | | 50 | | | 55 | | | 60 | | |
| Val | Ala | Ile | Glu | Ser | Asp | Ser | Val | Gln | Pro | Val | Pro | Arg | Phe | Arg | Gln |
| 65 | | | | | | | 70 | | | 75 | | | 80 | | |
| Glu | Leu | Phe | Arg | Met | Met | Ala | Val | Ala | Ala | Asp | Thr | Leu | Gln | Arg | Leu |
| | | | | | | | 85 | | | 90 | | | 95 | | |
| Gly | Ala | Arg | Val | Ala | Ser | Val | Asp | Met | Gly | Pro | Gln | Gln | Leu | Pro | Asp |
| | | | | | | | 100 | | | 105 | | | 110 | | |
| Gly | Gln | Ser | Leu | Pro | Ile | Pro | Pro | Val | Ile | Leu | Ala | Glu | Leu | Gly | Ser |
| | | | | | | | 115 | | | 120 | | | 125 | | |
| Asp | Pro | Thr | Lys | Gly | | | | | | | | | | | |
| | | | | | | | 130 | | | 133 | | | | | |

<210> 1428
<211> 38
<212>Amino acid
<213> Homo sapiens

<400> 1428

| | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Phe | Phe | Phe | Glu | Met | Glu | Ser | Cys | Ser | Val | Thr | Gln | Ala | Gly | Val |
| 1 | | | | | 5 | | | | | 10 | | | 15 | |
| Pro | Trp | His | Asp | Leu | Ser | Ser | Leu | Gln | Pro | Pro | Pro | Pro | Arg | Phe |
| | | | | | | | | | | | | | 20 | 30 |
| Arg | Phe | Ser | Cys | Leu | Ser | | | | | | | | | |
| | | | | | | | | | | | | | 35 | 38 |

<210> 1429
<211> 145
<212>Amino acid
<213> Homo sapiens

<400> 1429

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asp | Pro | Lys | Ala | Gln | Leu | Pro | Glu | Pro | Leu | Arg | Val | Leu | Trp | Thr | Ala |
| 1 | | | | | | | 5 | | | 10 | | | 15 | | |
| His | Leu | Val | Ala | Met | Ala | Pro | Gly | Ser | Arg | Thr | Ser | Leu | Leu | Ala | |
| | | | | | | | 20 | | | 25 | | | 30 | | |
| Phe | Ala | Leu | Leu | Cys | Leu | Pro | Trp | Leu | Gln | Glu | Ala | Gly | Ala | Val | Gln |
| | | | | | | | 35 | | | 40 | | | 45 | | |
| Thr | Val | Pro | Leu | Ser | Arg | Leu | Phe | Asp | His | Ala | Met | Leu | Gln | Ala | His |
| | | | | | | | 50 | | | 55 | | | 60 | | |
| Arg | Ala | His | Gln | Leu | Ala | Ile | Asp | Thr | Tyr | Gln | Glu | Phe | Glu | Thr | |
| 65 | | | | | | | 65 | | | 70 | | | 75 | | 80 |
| Tyr | Ile | Pro | Lys | Asp | Gln | Lys | Tyr | Ser | Phe | Leu | His | Asp | Ser | Gln | Thr |
| | | | | | | | 85 | | | 90 | | | 95 | | |
| Ser | Phe | Cys | Phe | Ser | Asp | Ser | Ile | Pro | Thr | Pro | Ser | Asn | Met | Glu | Glu |

| | | |
|---|---------------------------------|-----|
| 100 | 105 | 110 |
| Thr Gln Gln Lys Ser Asn Leu Glu | Leu Leu Arg Ile Ser Leu Leu Leu | |
| 115 | 120 | 125 |
| Ile Glu Ser Trp Leu Glu Pro Val Arg Ile Leu Met Ser Ile Val Pro | | |
| 130 | 135 | 140 |
| Asn | | |
| 145 | | |

<210> 1430
<211> 453
<212>Amino acid
<213> Homo sapiens

| | | |
|---|-----|-----|
| <400> 1430 | | |
| Phe Val Lys Leu Ile Lys Lys His Gln Ala Ala Met Glu Lys Glu Ala | | |
| 1 | 5 | 10 |
| Lys Val Met Ser Asn Glu Glu Lys Lys Phe Gln Gln His Ile Gln Ala | | 15 |
| 20 | 25 | 30 |
| Gln Gln Lys Lys Glu Leu Asn Ser Phe Leu Glu Ser Gln Lys Arg Glu | | |
| 35 | 40 | 45 |
| Tyr Lys Leu Arg Lys Glu Gln Leu Lys Glu Glu Leu Asn Glu Asn Gln | | |
| 50 | 55 | 60 |
| Ser Thr Pro Lys Lys Glu Lys Gln Glu Trp Leu Ser Lys Gln Lys Glu | | |
| 65 | 70 | 75 |
| Asn Ile Gln His Phe Gln Ala Glu Glu Glu Ala Asn Leu Leu Arg Arg | | 80 |
| 85 | 90 | 95 |
| Gln Arg Gln Tyr Leu Glu Leu Glu Cys Arg Arg Phe Lys Arg Arg Met | | |
| 100 | 105 | 110 |
| Leu Leu Gly Arg His Asn Leu Glu Gln Asp Leu Val Arg Glu Glu Leu | | |
| 115 | 120 | 125 |
| Asn Lys Arg Gln Thr Gln Lys Asp Leu Glu His Ala Met Leu Leu Arg | | |
| 130 | 135 | 140 |
| Gln His Glu Ser Met Gln Glu Leu Glu Phe Arg His Leu Asn Thr Ile | | 145 |
| 145 | 150 | 155 |
| Gln Lys Met Arg Cys Glu Leu Ile Arg Leu Gln His Gln Thr Glu Leu | | 160 |
| 165 | 170 | 175 |
| Thr Asn Gln Leu Glu Tyr Asn Lys Arg Arg Glu Arg Glu Leu Arg Arg | | |
| 180 | 185 | 190 |
| Lys His Val Met Glu Val Arg Gln Gln Pro Lys Ser Leu Lys Ser Lys | | |
| 195 | 200 | 205 |
| Glu Leu Gln Ile Lys Lys Gln Phe Gln Asp Thr Cys Lys Ile Gln Thr | | |
| 210 | 215 | 220 |
| Arg Gln Tyr Lys Ala Leu Arg Asn His Leu Leu Glu Thr Thr Pro Lys | | |
| 225 | 230 | 235 |
| Ser Glu His Lys Ala Val Leu Lys Arg Leu Lys Glu Glu Gln Thr Arg | | 240 |
| 245 | 250 | 255 |
| Lys Leu Ala Ile Leu Ala Glu Gln Tyr Asp His Ser Ile Asn Glu Met | | |
| 260 | 265 | 270 |
| Leu Ser Thr Gln Ala Leu Arg Leu Asp Glu Ala Gln Glu Ala Glu Cys | | |
| 275 | 280 | 285 |
| Gln Val Leu Lys Met Gln Leu Gln Glu Leu Glu Leu Leu Asn Ala | | |
| 290 | 295 | 300 |
| Tyr Gln Ser Lys Ile Lys Met Gln Ala Glu Ala Gln His Asp Arg Glu | | |
| 305 | 310 | 315 |
| Leu Arg Glu Leu Gln Arg Val Ser Leu Arg Arg Ala Leu Leu Glu | | 320 |
| 325 | 330 | 335 |
| Gln Lys Ile Glu Glu Glu Met Leu Ala Leu Gln Asn Glu Arg Thr Glu | | |
| 340 | 345 | 350 |
| Arg Ile Arg Ser Leu Leu Glu Arg Gln Ala Arg Glu Ile Glu Ala Phe | | |

| | | |
|---|-----|-----|
| 355 | 360 | 365 |
| Asp Ser Glu Ser Met Arg Leu Gly Phe Ser Asn Met Val Leu Ser Asn | | |
| 370 | 375 | 380 |
| Leu Ser Pro Glu Ala Phe Ser His Ser Tyr Pro Gly Ala Ser Gly Trp | | |
| 385 | 390 | 395 |
| Ser His Asn Pro Thr Gly Gly Pro Gly Pro His Trp Gly His Pro Met | | 400 |
| 405 | 410 | 415 |
| Gly Gly Pro Pro Gln Ala Trp Gly His Pro Met Gln Gly Gly Pro Gln | | |
| 420 | 425 | 430 |
| Pro Trp Gly His Pro Ser Gly Pro Met Gln Gly Val Pro Arg Gly Ser | | |
| 435 | 440 | 445 |
| Ser Met Gly Val Arg | | |
| 450 | 453 | |

<210> 1431
<211> 151
<212>Amino acid
<213> Homo sapiens

| | | |
|---|-----|-----|
| <400> 1431 | | |
| Leu Ala His Gly Ser Phe Gly Val Ser Asp Phe Pro Ala Pro Ala Ala | | |
| 1 | 5 | 10 |
| Ala Pro Ala His Thr Leu Thr Ser Phe Ser Gly Ser Leu Ser Pro Gln | | 15 |
| 20 | 25 | 30 |
| Phe Arg Lys Pro Leu Gly Arg Ala Pro Ala Met Pro Leu Val Arg Tyr | | |
| 35 | 40 | 45 |
| Arg Lys Val Val Ile Leu Gly Tyr Arg Cys Val Gly Lys Thr Ser Leu | | |
| 50 | 55 | 60 |
| Ala His Gln Phe Val Glu Gly Glu Phe Ser Glu Gly Tyr Asp Pro Thr | | |
| 65 | 70 | 75 |
| Val Glu Asn Thr Tyr Ser Lys Ile Val Thr Leu Gly Lys Asp Glu Phe | | 80 |
| 85 | 90 | 95 |
| His Leu His Leu Val Asp Thr Ala Gly Gln Asp Glu Tyr Ser Ile Leu | | |
| 100 | 105 | 110 |
| Pro Tyr Ser Phe Ile Ile Gly Val His Gly Tyr Val Leu Val Tyr Ser | | |
| 115 | 120 | 125 |
| Val Thr Ser Leu His Ser Phe Gln Val Ile Glu Ser Leu Tyr Gln Lys | | |
| 130 | 135 | 140 |
| Leu His Glu Gly His Gly Lys | | |
| 145 | 150 | 151 |

<210> 1432
<211> 514
<212>Amino acid
<213> Homo sapiens

| | | |
|---|----|----|
| <400> 1432 | | |
| Ser Ser Pro Ser Arg Glu Leu Cys Phe Tyr Gly Phe Trp Ile Ala Ser | | |
| 1 | 5 | 10 |
| Ser Trp Trp Ser Arg Trp Val Gly Ser Leu Gly Pro Gly Ile Leu Pro | | 15 |
| 20 | 25 | 30 |
| Ser Pro Pro Ala Arg Gly Arg Thr Phe Ala Ser Val Ser Arg Leu Pro | | |
| 35 | 40 | 45 |
| Pro Pro Trp Ser Ala Gly Ile Thr Leu Thr Pro Phe Leu Ile Cys Gln | | |

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ser | Gly | Ser | Val | Cys | Pro | Gly | Leu | Gly | Ala | Gly | Phe | Gly | Val | Arg | Ser |
| 65 | | | | 55 | | | 70 | | 75 | | | 60 | | | 80 |
| Phe | His | His | Pro | Val | Ala | Arg | Ser | Ala | Val | Leu | Leu | Leu | Pro | Leu | Ala |
| | | | | 85 | | | | 90 | | | | 95 | | | |
| Pro | Ala | Ala | Ala | Gln | Asp | Ser | Thr | Gln | Ala | Ser | Thr | Pro | Gly | Ser | Pro |
| | | | | 100 | | | | 105 | | | | 110 | | | |
| Leu | Ser | Pro | Thr | Glu | Tyr | Glu | Arg | Phe | Phe | Ala | Leu | Leu | Thr | Pro | Thr |
| | | | | 115 | | | 120 | | 125 | | | | | | |
| Trp | Lys | Ala | Glu | Thr | Thr | Cys | Arg | Leu | Arg | Ala | Thr | His | Gly | Cys | Arg |
| | | | | 130 | | | 135 | | 140 | | | | | | |
| Asn | Pro | Thr | Leu | Val | Gln | Leu | Asp | Gln | Tyr | Glu | Asn | His | Gly | Leu | Val |
| | | | | 145 | | | 150 | | 155 | | | 160 | | | |
| Pro | Asp | Gly | Ala | Val | Cys | Ser | Asn | Leu | Pro | Tyr | Ala | Ser | Trp | Phe | Glu |
| | | | | 165 | | | | 170 | | | | 175 | | | |
| Ser | Phe | Cys | Gln | Phe | Thr | His | Tyr | Arg | Cys | Ser | Asn | His | Val | Tyr | Tyr |
| | | | | 180 | | | | 185 | | | | 190 | | | |
| Ala | Lys | Arg | Val | Leu | Cys | Ser | Gln | Pro | Val | Ser | Ile | Leu | Ser | Pro | Asn |
| | | | | 195 | | | | 200 | | | 205 | | | | |
| Thr | Leu | Lys | Glu | Ile | Glu | Ala | Ser | Ala | Glu | Val | Ser | Pro | Thr | Thr | Met |
| | | | | 210 | | | 215 | | 220 | | | | | | |
| Thr | Ser | Pro | Ile | Ser | Pro | His | Phe | Thr | Val | Thr | Glu | Arg | Gln | Thr | Phe |
| | | | | 225 | | | 230 | | 235 | | | 240 | | | |
| Gln | Pro | Trp | Pro | Glu | Arg | Leu | Ser | Asn | Asn | Val | Glu | Glu | Leu | Leu | Gln |
| | | | | 245 | | | | 250 | | | 255 | | | | |
| Ser | Ser | Leu | Ser | Leu | Gly | Gly | Gln | Glu | Gln | Ala | Pro | Glu | His | Lys | Gln |
| | | | | 260 | | | 265 | | 270 | | | | | | |
| Glu | Gln | Gly | Val | Glu | His | Arg | Gln | Glu | Pro | Thr | Gln | Glu | His | Lys | Gln |
| | | | | 275 | | | 280 | | 285 | | | | | | |
| Glu | Glu | Gly | Gln | Gly | Glu | Glu | Gln | Glu | Glu | Glu | Gln | Glu | Glu | Glu | Glu |
| | | | | 290 | | | 295 | | 300 | | | | | | |
| Gly | Lys | Gln | Glu | Glu | Gly | Gln | Gly | Thr | Lys | Glu | Gly | Arg | Glu | Ala | Val |
| | | | | 305 | | | 310 | | 315 | | | 320 | | | |
| Ser | Gln | Leu | Gln | Thr | Asp | Ser | Glu | Pro | Lys | Phe | His | Ser | Glu | Ser | Leu |
| | | | | 325 | | | | 330 | | | 335 | | | | |
| Ser | Ser | Asn | Pro | Ser | Ser | Phe | Ala | Pro | Arg | Val | Arg | Glu | Val | Glu | Ser |
| | | | | 340 | | | | 345 | | | 350 | | | | |
| Thr | Pro | Met | Ile | Met | Glu | Asn | Ile | Gln | Glu | Leu | Ile | Arg | Ser | Ala | Gln |
| | | | | 355 | | | | 360 | | | 365 | | | | |
| Glu | Ile | Asp | Glu | Met | Asn | Glu | Ile | Tyr | Asp | Glu | Asn | Ser | Tyr | Trp | Arg |
| | | | | 370 | | | 375 | | 380 | | | | | | |
| Asn | Gln | Asn | Pro | Gly | Ser | Leu | Leu | Leu | Pro | His | Thr | Glu | Ala | Leu | |
| | | | | 385 | | | 390 | | 395 | | | 400 | | | |
| Leu | Val | Leu | Cys | Tyr | Ser | Ile | Val | Glu | Asn | Thr | Cys | Ile | Ile | Thr | Pro |
| | | | | 405 | | | | 410 | | | 415 | | | | |
| Thr | Ala | Lys | Ala | Trp | Lys | Tyr | Met | Glu | Glu | Glu | Ile | Leu | Gly | Phe | Gly |
| | | | | 420 | | | | 425 | | | 430 | | | | |
| Lys | Ser | Val | Cys | Asp | Ser | Leu | Gly | Arg | Arg | His | Met | Ser | Thr | Cys | Ala |
| | | | | 435 | | | | 440 | | | 445 | | | | |
| Leu | Cys | Asp | Phe | Cys | Ser | Leu | Lys | Leu | Glu | Gln | Cys | His | Ser | Glu | Ala |
| | | | | 450 | | | | 455 | | | 460 | | | | |
| Ser | Leu | Gln | Arg | Gln | Gln | Cys | Asp | Thr | Ser | His | Lys | Thr | Pro | Phe | Val |
| | | | | 465 | | | | 470 | | | 475 | | | 480 | |
| Ser | Pro | Leu | Leu | Ala | Ser | Gln | Ser | Leu | Ser | Ile | Gly | Asn | Gln | Val | Gly |
| | | | | 485 | | | | 490 | | | 495 | | | | |
| Ser | Pro | Glu | Ser | Gly | Arg | Phe | Tyr | Gly | Leu | Asp | Leu | Tyr | Gly | Gly | Leu |
| | | | | 500 | | | | 505 | | | 510 | | | | |
| His | Met | | | 514 | | | | | | | | | | | |

<210> 1433
<211> 241
<212>Amino acid

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(241)

<223> X = any amino acid or stop code

<400> 1433
 Val Ser Trp Val Pro Ser Lys Asp Gly Asp Val Glu Gly Ala Arg Arg
 1 5 10 15
 Pro Phe Thr Arg Leu Asn Thr Ser Leu Gly Pro Gly Leu Gln Glu Gly
 20 25 30
 Arg Arg Arg Thr Trp Leu Val Pro Ile Pro Gly Ala Val Leu Pro Gly
 35 40 45
 Arg Thr Gln Glu Gln Pro Arg Ala Ser Pro Leu Tyr Xaa Pro Gly Ala
 50 55 60
 Pro Pro Cys Gln Pro Gln Gly Leu Val Ala Gly Pro Trp Ala Gln Xaa
 65 70 75 80
 Ala Gly Leu Arg Ser Asp Gly Phe Gly Pro Trp Pro Trp Arg Leu Val
 85 90 95
 Gly Thr Ala Gly Pro Arg Glu Lys Lys Val Gln Lys Ser Lys Cys Trp
 100 105 110
 His Phe Arg Cys Gly Arg His Pro Ala Arg Arg Ser Gly Trp Ala Gly
 115 120 125
 Arg His Ala Ser Leu Leu Ala Thr Gly Arg Pro Cys Ser Ser Ala Pro
 130 135 140
 Ser Gln Gln Pro Leu Gly Thr Ala Gly Asp Ser Arg Gln Glu Leu Leu
 145 150 155 160
 Arg Pro Pro Leu Val Xaa Val Asn Gly Ala Gln Ser Ser Ala Ala Gly
 165 170 175
 Asp Trp Gly Ser Ser Pro Arg Thr Ala Gln Ala Leu Ala Arg Pro His
 180 185 190
 Arg Leu Gly His His Pro Ala Ala Val Ala Pro Ala Ala Arg Leu Arg
 195 200 205
 Thr Gln Ser Gly His Ser Pro Arg Gly Pro Leu Cys Arg Ser Pro Gly
 210 215 220
 Ser Pro Arg Arg Met Gly Thr Trp Arg Gly Pro Ala Gly His Ser His
 225 230 235 240
 Asp
 241

<210> 1434

<211> 127

<212> Amino acid

<213> Homo sapiens

<400> 1434
 Lys Thr Val Ala Glu Glu Ala Ser Val Gly Asn Pro Glu Gly Ala Phe
 1 5 10 15
 Met Lys Met Leu Gln Ala Arg Lys Gln His Met Ser Thr Glu Leu Thr
 20 25 30
 Ile Glu Ser Glu Ala Pro Ser Asp Ser Ser Gly Ile Asn Leu Ser Gly
 35 40 45
 Phe Gly Ser Glu Gln Leu Asp Thr Asn Asp Glu Ser Asp Val Ser Ser
 50 55 60

Ala Leu Ser Tyr Ile Leu Pro Tyr Leu Ser Leu Arg Asn Leu Gly Ala
 65 70 75 80
 Glu Ser Ile Leu Leu Pro Phe Thr Glu Gln Leu Phe Ser Asn Val Gln
 85 90 95
 Asp Gly Asp Arg Leu Leu Ser Ile Leu Lys Asn Asn Arg Lys Ser Pro
 100 105 110
 Ser Gln Ser Leu Leu Gly Asn Lys Phe Lys Asn Lys Ile Phe
 115 120 125 127

<210> 1435
<211> 182
<212>Amino acid
<213> Homo sapiens

<400> 1435
 Gly Glu Cys Phe Ile Met Ala Ala Val Val Gln Gln Asn Asp Leu Val
 1 5 10 15
 Phe Glu Phe Ala Ser Asn Val Met Glu Asp Glu Arg Gln Leu Gly Asp
 20 25 30
 Pro Ala Ile Phe Pro Ala Val Ile Val Glu His Val Pro Gly Ala Asp
 35 40 45
 Ile Leu Asn Ser Tyr Ala Gly Leu Ala Cys Val Glu Glu Pro Asn Asp
 50 55 60
 Met Ile Thr Glu Ser Ser Leu Asp Val Ala Glu Glu Glu Ile Ile Asp
 65 70 75 80
 Asp Asp Asp Asp Asp Ile Thr Leu Thr Val Glu Ala Ser Cys His Asp
 85 90 95
 Gly Asp Glu Thr Ile Glu Thr Ile Glu Ala Ala Glu Ala Leu Leu Asn
 100 105 110
 Met Asp Ser Pro Gly Pro Met Leu Asp Glu Lys Arg Ile Asn Asn Asn
 115 120 125
 Ile Phe Ser Ser Pro Glu Asp Asp Met Val Val Ala Pro Val Thr His
 130 135 140
 Val Ser Val Thr Leu Asp Gly Ile Pro Glu Val Met Glu Thr Gln Gln
 145 150 155 160
 Val Gln Glu Lys Tyr Ala Asp Ser Pro Gly Ala Ser Ser Pro Glu Gln
 165 170 175
 Pro Lys Arg Lys Lys Lys
 180 182

<210> 1436
<211> 154
<212>Amino acid
<213> Homo sapiens

<400> 1436
 His Glu Ala Ser Gly Val Ser Arg Ala Leu Leu Gln Ser Ala Pro Gly
 1 5 10 15
 Thr Pro Ala Thr Val Gly Ile Ser Val Gly Glu Leu Trp Pro Phe Ala
 20 25 30
 Arg Cys Cys Ser His Ser Tyr Val Arg Ser Leu Arg Gly Leu Ser Val
 35 40 45
 Ser Thr His Leu Leu Cys Phe Thr Ile Tyr Ile Met Asn Pro Ser Met
 50 55 60

Lys Gln Lys Gln Glu Glu Ile Lys Glu Asn Ile Lys Thr Ser Ser Val
 65 70 75 80
 Pro Arg Arg Thr Leu Lys Met Ile Gln Pro Ser Ala Ser Gly Ser Leu
 85 90 95
 Val Gly Arg Glu Asn Glu Leu Ser Ala Gly Leu Ser Lys Arg Lys His
 100 105 110
 Arg Asn Asp His Leu Thr Ser Thr Thr Ser Ser Pro Gly Val Ile Val
 115 120 125
 Pro Glu Ser Ser Glu Asn Lys Asn Leu Gly Gly Val Thr Gln Glu Ser
 130 135 140
 Phe Asp Leu Met Ile Lys Gly Met Lys Lys
 145 150 154

<210> 1437
<211> 63
<212>Amino acid
<213> Homo sapiens

<400> 1437
 Pro Leu Pro Ala Arg Gly Lys Ser Thr Leu Pro Ala Thr Phe Cys Ser
 1 5 10 15
 Pro Ser Ala Pro Glu Leu Ala Ser Met Ser Val Val Pro Pro Asn Arg
 20 25 30
 Ser Gln Thr Gly Trp Pro Arg Gly Val Thr Gln Phe Gly Asn Lys Tyr
 35 40 45
 Ile Gln Gln Thr Lys Pro Leu Thr Leu Glu Arg Thr Ile Asn Leu
 50 55 60 63

<210> 1438
<211> 140
<212>Amino acid
<213> Homo sapiens

<400> 1438
 Ala Glu Gly Glu Asp Val Pro Pro Leu Pro Thr Ser Ser Gly Asp Gly
 1 5 10 15
 Trp Glu Lys Asp Leu Glu Glu Ala Leu Glu Ala Gly Gly Cys Asp Leu
 20 25 30
 Glu Thr Leu Arg Asn Ile Ile Gln Gly Arg Pro Leu Pro Ala Asp Leu
 35 40 45
 Arg Ala Lys Val Trp Lys Ile Ala Leu Asn Val Ala Gly Lys Gly Asp
 50 55 60
 Ser Leu Ala Ser Trp Asp Gly Ile Leu Asp Leu Pro Glu Gln Asn Thr
 65 70 75 80
 Ile His Lys Asp Cys Leu Gln Phe Ile Asp Gln Leu Ser Val Pro Glu
 85 90 95
 Glu Lys Ala Ala Glu Leu Leu Asp Ile Glu Ser Val Ile Thr Phe
 100 105 110
 Tyr Cys Lys Ser Arg Asn Ile Lys Tyr Ser Thr Ser Leu Ser Trp Ile
 115 120 125
 His Leu Leu Lys Pro Leu Val His Leu Gln Leu Pro
 130 135 140

<210> 1439
 <211> 84
 <212>Amino acid
 <213> Homo sapiens

<400> 1439
 Ala Leu Pro Lys Phe Leu Thr His Gly Val Lys Ser Asn Glu Arg Val
 1 5 10 15
 Val Val Trp Leu Phe Pro Pro Ser Phe Arg Ala Ala Thr Met Val His
 20 25 30
 Met Asn Val Leu Pro Asp Ala Leu Lys Ser Ile Asn Asn Ala Glu Arg
 35 40 45
 Arg Gly Lys Pro Gln Val Leu Ile Arg Leu Cys Ser Lys Ile Ile Ile
 50 55 60
 Trp Phe Leu Thr Val Met Val Lys Tyr Gly Tyr Ile Gly Lys Phe Glu
 65 70 75 80
 Pro Thr Arg Pro
 84

<210> 1440
 <211> 255
 <212>Amino acid
 <213> Homo sapiens

<400> 1440
 Ala Met Ala Gln Tyr Gly His Pro Ser Pro Leu Gly Met Ala Ala Arg
 1 5 10 15
 Glu Glu Leu Tyr Ser Lys Val Thr Pro Arg Arg Asn Arg Gln Gln Arg
 20 25 30
 Pro Gly Thr Ile Lys His Gly Ser Ala Leu Asp Val Leu Ser Met
 35 40 45
 Gly Phe Pro Arg Ala Arg Ala Gln Lys Ala Leu Ala Ser Thr Gly Gly
 50 55 60
 Arg Ser Val Gln Ala Ala Cys Asp Trp Leu Phe Ser His Val Gly Asp
 65 70 75 80
 Pro Phe Leu Asp Asp Pro Leu Pro Arg Glu Tyr Val Leu Tyr Leu Arg
 85 90 95
 Pro Thr Gly Pro Leu Ala Gln Lys Leu Ser Asp Phe Trp Gln Gln Ser
 100 105 110
 Lys Gln Ile Cys Gly Lys Asn Lys Ala His Asn Ile Phe Pro His Ile
 115 120 125
 Thr Leu Cys Gln Phe Phe Met Cys Glu Asp Ser Lys Val Asp Ala Leu
 130 135 140
 Gly Glu Ala Leu Gln Thr Thr Val Ser Arg Trp Lys Cys Lys Phe Ser
 145 150 155 160
 Ala Pro Leu Pro Leu Glu Leu Tyr Thr Ser Ser Asn Phe Ile Gly Leu
 165 170 175
 Phe Val Lys Glu Asp Ser Ala Glu Val Leu Lys Lys Phe Ala Ala Asp
 180 185 190
 Phe Ala Ala Glu Ala Ala Ser Lys Thr Glu Val His Val Glu Pro His
 195 200 205
 Lys Lys Gln Leu His Val Thr Leu Ala Tyr His Phe Gln Ala Ser His
 210 215 220
 Leu Pro Thr Leu Glu Lys Leu Ala Gln Asn Ile Asp Val Lys Leu Gly
 225 230 235 240

Cys Asp Trp Val Ala Thr Ile Phe Ser Arg Asp Ile Arg Phe Ala
 245 250 255

<210> 1441
<211> 134
<212>Amino acid
<213> Homo sapiens

<400> 1441
Gln Thr Arg Pro Ala Ser Pro Arg Thr Ala Arg Glu Ser Val Leu Gly
 1 5 10 15
Val Ser Gln Asn Met Ser Phe Asn Leu Gln Ser Ser Lys Lys Leu Phe
 20 25 30
Ile Phe Leu Gly Lys Ser Leu Phe Ser Leu Leu Glu Ala Met Ile Phe
 35 40 45
Ala Leu Leu Pro Lys Pro Arg Lys Asn Val Ala Gly Glu Ile Val Leu
 50 55 60
Ile Thr Gly Ala Gly Ser Gly Leu Gly Arg Leu Leu Ala Leu Gln Phe
 65 70 75 80
Ala Arg Leu Gly Ser Val Leu Val Leu Trp Asp Ile Asn Lys Glu Gly
 85 90 95
Asn Glu Glu Thr Cys Lys Met Ala Arg Glu Ala Gly Ala Thr Arg Val
 100 105 110
His Ala Tyr Thr Cys Asp Cys Ser Gln Lys Glu Gly Val Tyr Arg Val
 115 120 125
Ala Asp Gln Val Lys Lys
 130 134

<210> 1442
<211> 155
<212>Amino acid
<213> Homo sapiens

<400> 1442
Met Val Ala Arg Lys Gly Gln Lys Ser Pro Arg Phe Arg Arg Val Thr
 1 5 10 15
Cys Phe Leu Arg Leu Gly Arg Ser Thr Leu Leu Glu Leu Glu Pro Ala
 20 25 30
Gly Arg Pro Cys Ser Gly Arg Thr Arg His Arg Ala Leu His Arg Arg
 35 40 45
Leu Val Ala Cys Val Thr Val Ser Ser Arg Arg His Arg Lys Glu Ala
 50 55 60
Gly Arg Gly Arg Ala Glu Ser Phe Ile Ala Val Gly Met Ala Ala Pro
 65 70 75 80
Ser Met Lys Glu Arg Gln Val Cys Trp Gly Ala Arg Asp Glu Tyr Trp
 85 90 95
Lys Cys Leu Asp Glu Asn Leu Glu Asp Ala Ser Gln Cys Lys Lys Leu
 100 105 110
Arg Ser Ser Phe Glu Ser Ser Cys Pro Gln Gln Trp Ile Lys Tyr Phe
 115 120 125
Asp Lys Arg Arg Asp Tyr Leu Lys Glu Lys Phe Glu Ala Gly
 130 135 140
Gln Phe Glu Pro Ser Glu Thr Thr Ala Lys Ser
 145 150 155

<210> 1443
<211> 157
<212>Amino acid
<213> Homo sapiens

<400> 1443
Pro Ala Pro Ala Ala Arg Ser Arg Glu Leu Leu Lys Glu Leu Arg Asn
1 5 10 15
Gly Gln Asp Met Asp Thr Val Val Phe Glu Asp Val Val Val Asp Phe
20 25 30
Thr Leu Glu Glu Trp Ala Leu Leu Asn Pro Ala Gln Arg Lys Leu Tyr
35 40 45
Arg Asp Val Met Leu Glu Thr Phe Lys His Leu Ala Ser Val Asp Asn
50 55 60
Glu Ala Gln Leu Lys Ala Ser Gly Ser Ile Ser Gln Gln Asp Thr Ser
65 70 75 80
Gly Glu Lys Leu Ser Leu Lys Gln Lys Ile Glu Lys Phe Thr Arg Lys
85 90 95
Asn Ile Trp Ala Ser Leu Leu Gly Lys Asn Trp Glu Glu His Ser Val
100 105 110
Lys Asp Lys His Asn Thr Lys Glu Arg His Leu Ser Arg Asn Pro Arg
115 120 125
Val Glu Arg Pro Cys Lys Ser Ser Lys Gly Asn Lys Arg Gly Arg Thr
130 135 140
Phe Arg Lys Thr Arg Asn Cys Asn Arg His Leu Arg Arg
145 150 155 157

<210> 1444
<211> 53
<212>Amino acid
<213> Homo sapiens

<400> 1444
Cys Val Cys Gly Phe Phe Val Cys Phe Glu Thr Lys Ser Cys Phe Val
1 5 10 15
Ala Gln Ala Gly Val Gln Trp His Asn Leu Ser Ser Leu Gln Ala Leu
20 25 30
Pro Pro Gly Phe Lys Gln Phe Ser Cys Leu Ser Leu Leu Ser Ser Trp
35 40 45
His Tyr Arg Arg Val
50 53

<210> 1445
<211> 106
<212>Amino acid
<213> Homo sapiens

<400> 1445

Gly Thr Arg Leu Arg Arg Arg Glu Ala Val Trp Phe Glu Val Val
 1 5 10 15
 Asn Met Asp Phe Ser Arg Leu His Met Tyr Ser Pro Pro Gln Cys Val
 20 25 30
 Pro Glu Asn Thr Gly Tyr Thr Tyr Ala Leu Ser Ser Ser Tyr Ser Ser
 35 40 45
 Asp Ala Leu Asp Phe Glu Thr Glu His Lys Leu Asp Pro Val Phe Asp
 50 55 60
 Ser Pro Arg Met Ser Arg Arg Ser Leu Arg Leu Ala Thr Thr Ala Cys
 65 70 75 80
 Thr Leu Gly Asp Gly Glu Ala Val Gly Ala Asp Ser Gly Thr Ser Ser
 85 90 95
 Ala Val Ser Leu Lys Asn Arg Ala Ala Arg
 100 105 106

<210> 1446
<211> 95
<212>Amino acid
<213> Homo sapiens

<400> 1446
Asp Thr Met Gln Ala Val Val Pro Leu Asn Lys Met Thr Ala Ile Ser
 1 5 10 15
 Pro Glu Pro Gln Thr Leu Ala Ser Thr Glu Gln Asn Glu Val Pro Arg
 20 25 30
 Val Val Thr Ser Gly Glu Gln Glu Ala Ile Leu Arg Gly Asn Ala Ala
 35 40 45
 Asp Ala Glu Ser Phe Arg Gln Arg Phe Arg Trp Phe Cys Tyr Ser Glu
 50 55 60
 Val Ala Gly Pro Arg Lys Ala Leu Ser Gln Leu Trp Glu Leu Cys Asn
 65 70 75 80
 Gln Trp Leu Arg Pro Asp Ile His Thr Lys Glu Gln Ile Leu Glu
 85 90 95

<210> 1447
<211> 127
<212>Amino acid
<213> Homo sapiens

<400> 1447
Pro Ile Cys Leu Phe Ser Arg Pro Thr Leu Arg Pro Ser Arg Ser Lys
 1 5 10 15
 Val Ser Leu Ile Glu Gly Arg Gly Ala Asn Met Ala Ala Arg Trp Arg
 20 25 30
 Phe Trp Cys Val Ser Val Thr Met Val Val Ala Leu Ile Val Cys
 35 40 45
 Asp Val Pro Ser Ala Ser Ala Gln Arg Lys Lys Glu Met Val Leu Ser
 50 55 60
 Glu Lys Val Ser Gln Leu Met Glu Trp Thr Asn Lys Arg Pro Val Ile
 65 70 75 80
 Arg Met Asn Gly Asp Lys Phe Arg Arg Leu Val Lys Ala Pro Pro Arg
 85 90 95
 Asn Tyr Ser Val Ile Val Met Phe Thr Ala Leu Gln Leu His Arg Gln
 100 105 110

Cys Val Val Cys Lys Tyr Glu Leu Gln Leu Arg Phe Lys Ile Lys
 115 120 125 127

<210> 1448
<211> 143
<212>Amino acid
<213> Homo sapiens

<400> 1448
Gln Met Arg Val Lys Asp Pro Thr Lys Ala Leu Pro Glu Lys Ala Lys
 1 5 10 15
Arg Ser Lys Arg Pro Thr Val Pro His Asp Glu Asp Ser Ser Asp Asp
 20 25 30
Ile Ala Val Gly Leu Thr Cys Gln His Val Ser His Ala Ile Ser Val
 35 40 45
Asn His Val Lys Arg Ala Ile Ala Glu Asn Leu Trp Ser Val Cys Ser
 50 55 60
Glu Cys Leu Lys Glu Arg Arg Phe Tyr Asp Gly Gln Leu Val Leu Thr
 65 70 75 80
Ser Asp Ile Trp Leu Cys Leu Lys Cys Gly Phe Gln Gly Cys Gly Lys
 85 90 95
Asn Ser Glu Ser Gln His Ser Leu Lys His Phe Lys Ser Ser Arg Thr
 100 105 110
Glu Pro His Cys Ile Ile Ile Asn Leu Ser Thr Trp Ile Ile Trp Trp
 115 120 125
Tyr Glu Trp Asp Glu Lys Ile Phe Thr Pro Leu Asn Lys Lys Gly
 130 135 140 143

<210> 1449
<211> 121
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(121)
<223> X = any amino acid or stop code

<400> 1449
Ala Lys Glu Arg Gly Glu Glu Arg Gln Gly Glu Gly Gly Trp Leu
 1 5 10 15
Ser Gly Ser Arg Trp Pro Leu Val Arg Ser Ala Phe Val Pro Ala Pro
 20 25 30
Ser Ser Leu Ile Leu Ser Met Cys Leu Ser Pro Gly Ile Pro Glu Ala
 35 40 45
Ala Pro Asp Ser Pro Leu Thr Ala Ser Ala Pro Thr Pro Xaa Val Met
 50 55 60
Leu Leu Gly Asp Thr Gly Val Gly Lys Thr Cys Phe Leu Ile Gln Phe
 65 70 75 80
Lys Asp Gly Ala Phe Leu Ser Gly Thr Phe Ile Ala Thr Val Gly Ile
 85 90 95
Asp Phe Arg Val Arg Trp Leu Gln Ala Leu Ala Ser Ser Arg Glu Pro
 100 105 110
Gly Leu Trp Leu Arg His Gly Gly Val

115

120 121

<210> 1450
<211> 76
<212>Amino acid
<213> Homo sapiens

<400> 1450
Phe Tyr Pro Arg Ser Ser Ala Asp Leu Pro Phe Gln Thr Thr Arg Cys
1 5 10 15
Glu Phe Gln Thr Ser Val Met Glu Leu Ala His Ser Leu Leu Asn
20 25 30
Glu Glu Ala Leu Ala Gln Ile Thr Glu Ala Lys Arg Pro Val Phe Ile
35 40 45
Phe Glu Trp Leu Arg Phe Leu Asp Lys Val Leu Val Ala Ala Asn Lys
50 55 60
Val Trp Tyr Cys Ser Phe Phe Pro Val Ala Leu Thr
65 70 75 76

<210> 1451
<211> 95
<212>Amino acid
<213> Homo sapiens

<400> 1451
Met Asn Met Lys Gln Lys Ser Val Tyr Gln Gln Thr Lys Ala Leu Leu
1 5 10 15
Cys Lys Asn Phe Leu Lys Lys Trp Arg Met Lys Arg Glu Ser Leu Leu
20 25 30
Glu Trp Gly Leu Ser Ile Leu Leu Gly Leu Cys Ile Ala Leu Phe Ser
35 40 45
Ser Ser Met Arg Asn Val Gln Phe Pro Gly Met Ala Pro Gln Asn Leu
50 55 60
Gly Arg Val Asp Lys Phe Asn Ser Ser Ser Leu Met Val Val Tyr Thr
65 70 75 80
Pro Ile Ser Asn Leu Thr Gln Gln Ile Met Asn Lys Thr Ala Leu
85 90 95

<210> 1452
<211> 174
<212>Amino acid
<213> Homo sapiens

<400> 1452
Ser Pro Gln Gly Asn Gly Cys Pro Asp Val Thr Gly Asp Ser Val Ile
1 5 10 15
Arg Val Pro Leu Thr Leu Leu Val His Asn Leu Ala Gly Leu Thr Gly
20 25 30
Leu Leu His His Cys Leu Ser Gly Pro Leu Pro Ala Pro Ser Pro Pro

| | | |
|---|-----|-----|
| 35 | 40 | 45 |
| Pro Ala Met Ser Ser Ser Arg Lys Asp His Leu Gly Ala Ser Ser Ser | | |
| 50 | 55 | 60 |
| Glu Pro Leu Pro Val Ile Ile Val Gly Asn Gly Pro Ser Gly Ile Cys | | |
| 65 | 70 | 75 |
| Leu Ser Tyr Leu Leu Ser Gly Tyr Thr Pro Tyr Thr Lys Pro Asp Ala | | |
| 85 | 90 | 95 |
| Ile His Pro His Pro Leu Leu Gln Arg Lys Leu Thr Glu Ala Pro Gly | | |
| 100 | 105 | 110 |
| Val Ser Ile Leu Asp Gln Asp Leu Asp Tyr Leu Ser Glu Gly Leu Glu | | |
| 115 | 120 | 125 |
| Gly Arg Ser Gln Ser Pro Val Ala Leu Leu Phe Asp Ala Leu Leu Arg | | |
| 130 | 135 | 140 |
| Pro Asp Thr Asp Phe Gly Gly Asn Met Lys Ser Val Leu Thr Trp Lys | | |
| 145 | 150 | 155 |
| His Arg Lys Glu His Ala Ile Pro His Val Val Leu Gly Arg | | |
| 165 | 170 | 174 |

<210> 1453
<211> 518
<212>Amino acid
<213> Homo sapiens

| | | | |
|---|-----|-----|-----|
| <400> 1453 | | | |
| Asn Arg Arg Thr Arg Ala Gln Arg Cys Gln Arg Gly Arg Ser Cys Gly | | | |
| 1 | 5 | 10 | 15 |
| Ala Arg Glu Glu Glu Val Glu Pro Gly Thr Ala Arg Pro Pro Ala | | | |
| 20 | 25 | 30 | |
| Ala Ser Ala Met Asp Ala Ser Leu Glu Lys Ile Ala Asp Pro Thr Leu | | | |
| 35 | 40 | 45 | |
| Ala Glu Met Gly Lys Asn Leu Lys Glu Ala Val Lys Met Leu Glu Asp | | | |
| 50 | 55 | 60 | |
| Ser Gln Arg Arg Thr Glu Glu Glu Asn Gly Lys Lys Leu Ile Ser Gly | | | |
| 65 | 70 | 75 | 80 |
| Asp Ile Pro Gly Pro Leu Gln Gly Ser Gly Gln Asp Met Val Ser Ile | | | |
| 85 | 90 | 95 | |
| Leu Gln Leu Val Gln Asn Leu Met His Gly Asp Glu Asp Glu Pro | | | |
| 100 | 105 | 110 | |
| Gln Ser Pro Arg Ile Gln Asn Ile Gly Glu Gln Gly His Met Ala Leu | | | |
| 115 | 120 | 125 | |
| Leu Gly His Ser Leu Gly Ala Tyr Ile Ser Thr Leu Asp Lys Glu Lys | | | |
| 130 | 135 | 140 | |
| Leu Arg Lys Leu Thr Thr Arg Ile Leu Ser Asp Thr Thr Leu Trp Leu | | | |
| 145 | 150 | 155 | 160 |
| Cys Arg Ile Phe Arg Tyr Glu Asn Gly Cys Ala Tyr Phe His Glu Glu | | | |
| 165 | 170 | 175 | |
| Glu Arg Glu Gly Leu Ala Lys Ile Cys Arg Leu Ala Ile His Ser Arg | | | |
| 180 | 185 | 190 | |
| Tyr Glu Asp Phe Val Val Asp Gly Phe Asn Val Leu Tyr Asn Lys Lys | | | |
| 195 | 200 | 205 | |
| Pro Val Ile Tyr Leu Ser Ala Ala Ala Arg Pro Gly Leu Gly Gln Tyr | | | |
| 210 | 215 | 220 | |
| Leu Cys Asn Gln Leu Gly Leu Pro Phe Pro Cys Leu Cys Arg Val Pro | | | |
| 225 | 230 | 235 | 240 |
| Cys Asn Thr Val Phe Gly Ser Gln His Gln Met Asp Val Ala Phe Leu | | | |
| 245 | 250 | 255 | |
| Glu Lys Leu Ile Lys Asp Asp Ile Glu Arg Gly Arg Leu Pro Leu Leu | | | |
| 260 | 265 | 270 | |
| Leu Val Ala Asn Ala Gly Thr Ala Ala Val Gly His Thr Asp Lys Ile | | | |

| | | |
|---|-----|-----|
| 275 | 280 | 285 |
| Gly Arg Leu Lys Glu Leu Cys Glu Gln Tyr Gly Ile Trp Leu His Val | | |
| 290 | 295 | 300 |
| Glu Gly Val Asn Leu Ala Thr Ala Leu Gly Tyr Val Ser Ser Ser | | |
| 305 | 310 | 315 |
| Val Leu Ala Ala Lys Cys Asp Ser Met Thr Met Thr Pro Gly Pro | | |
| 325 | 330 | 335 |
| Trp Leu Gly Leu Pro Ala Val Pro Ala Val Thr Leu Tyr Lys His Asp | | |
| 340 | 345 | 350 |
| Asp Pro Ala Leu Thr Leu Val Ala Gly Leu Thr Ser Asn Lys Pro Thr | | |
| 355 | 360 | 365 |
| Asp Lys Leu Arg Ala Leu Pro Leu Trp Leu Ser Leu Gln Tyr Leu Gly | | |
| 370 | 375 | 380 |
| Leu Asp Gly Phe Val Glu Arg Ile Lys His Ala Cys Gln Leu Ser Gln | | |
| 385 | 390 | 395 |
| Arg Leu Gln Glu Ser Leu Lys Lys Val Asn Tyr Ile Lys Ile Leu Val | | |
| 405 | 410 | 415 |
| Glu Asp Glu Leu Ser Ser Pro Val Val Phe Arg Phe Phe Gln Glu | | |
| 420 | 425 | 430 |
| Leu Pro Gly Ser Asp Pro Val Phe Lys Ala Val Pro Val Pro Asn Met | | |
| 435 | 440 | 445 |
| Thr Pro Ser Gly Val Gly Arg Glu Arg His Ser Cys Asp Ala Leu Asn | | |
| 450 | 455 | 460 |
| Arg Trp Leu Gly Glu Gln Leu Lys Gln Leu Val Pro Ala Ser Gly Leu | | |
| 465 | 470 | 475 |
| 480 | | |
| Thr Val Met Asp Leu Glu Ala Glu Gly Thr Cys Leu Arg Phe Ser Pro | | |
| 485 | 490 | 495 |
| Leu Met Thr Ala Ala Gly Lys Pro Gly Leu Val Asp Ile Pro Cys Phe | | |
| 500 | 505 | 510 |
| Cys Ser Gly Ala Ala Gly | | |
| 515 | 518 | |

<210> 1454
<211> 185
<212>Amino acid
<213> Homo sapiens

| | | | |
|---|-----|-----|-----|
| <400> 1454 | | | |
| Leu Cys Ile Met Asp Thr Lys Glu Glu Lys Lys Glu Arg Lys Gln Ser | | | |
| 1 | 5 | 10 | 15 |
| Tyr Phe Ala Arg Leu Lys Lys Lys Gln Ala Lys Gln Asn Ala Glu | | | |
| 20 | 25 | 30 | |
| Thr Ala Ser Ala Val Ala Thr Arg Thr His Thr Gly Lys Glu Asp Asn | | | |
| 35 | 40 | 45 | |
| Asn Thr Val Val Leu Glu Pro Asp Lys Cys Asn Ile Ala Val Glu Glu | | | |
| 50 | 55 | 60 | |
| Glu Tyr Met Thr Asp Glu Lys Lys Arg Lys Ser Asn Gln Leu Lys | | | |
| 65 | 70 | 75 | 80 |
| Glu Ile Arg Arg Thr Glu Leu Lys Arg Tyr Tyr Ser Ile Asp Asp Asn | | | |
| 85 | 90 | 95 | |
| Gln Asn Lys Thr His Asp Lys Lys Glu Lys Lys Met Val Val Gln Lys | | | |
| 100 | 105 | 110 | |
| Pro His Gly Thr Met Glu Tyr Thr Ala Gly Asn Gln Asp Thr Leu Asn | | | |
| 115 | 120 | 125 | |
| Ser Ile Ala Leu Lys Phe Asn Ile Thr Pro Asn Lys Leu Val Glu Leu | | | |
| 130 | 135 | 140 | |
| Asn Lys Leu Phe Thr His Thr Ile Val Pro Gly Gln Val Leu Phe Val | | | |
| 145 | 150 | 155 | 160 |
| Pro Asp Ala Asn Ser Pro Ser Ser Thr Leu Arg Leu Ser Ser Ser | | | |

| | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | 165 | | 170 | | 175 | | | |
| Pro | Gly | Ala | Thr | Val | Ser | Pro | Ser | Ser |
| | | | | | | | | |
| | | 180 | | | | 185 | | |

<210> 1455
<211> 206
<212>Amino acid
<213> Homo sapiens

| | | | | | | | | | | | | | | | |
|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | 1455 | | | | | | | | | | | | | | |
| Ser | Ala | Gly | Gly | Asp | Ser | Cys | Arg | Ala | Val | Pro | Met | Leu | Arg | Phe | Pro |
| | | | | | | | | 1 | 5 | 10 | 15 | | | | |
| Thr | Cys | Phe | Pro | Ser | Phe | Arg | Val | Val | Gly | Glu | Lys | Gln | Leu | Pro | Gln |
| | | | | | | | | 20 | 25 | 30 | | | | | |
| Glu | Ile | Ile | Phe | Leu | Val | Trp | Ser | Pro | Lys | Arg | Asp | Leu | Ile | Ala | Leu |
| | | | | | | | | 35 | 40 | 45 | | | | | |
| Ala | Asn | Thr | Ala | Gly | Glu | Val | Leu | Leu | His | Arg | Leu | Ala | Ser | Phe | His |
| | | | | | | | | 50 | 55 | 60 | | | | | |
| Arg | Val | Trp | Ser | Phe | Pro | Pro | Asn | Glu | Asn | Thr | Gly | Lys | Glu | Val | Thr |
| | | | | | | | | 65 | 70 | 75 | | | | 80 | |
| Cys | Leu | Ala | Trp | Arg | Pro | Asp | Gly | Lys | Leu | Leu | Ala | Phe | Ala | Leu | Ala |
| | | | | | | | | 85 | 90 | 95 | | | | | |
| Asp | Thr | Lys | Ile | Val | Leu | Cys | Asp | Val | Glu | Lys | Pro | Glu | Ser | Leu | |
| | | | | | | | | 100 | 105 | 110 | | | | | |
| His | Ser | Phe | Ser | Val | Glu | Ala | Pro | Val | Ser | Cys | Met | His | Trp | Met | Glu |
| | | | | | | | | 115 | 120 | 125 | | | | | |
| Val | Thr | Val | Glu | Ser | Ser | Val | Leu | Thr | Ser | Phe | Tyr | Asn | Ala | Glu | Asp |
| | | | | | | | | 130 | 135 | 140 | | | | | |
| Glu | Ser | Asn | Leu | Leu | Leu | Pro | Lys | Leu | Pro | Thr | Leu | Pro | Lys | Asn | Tyr |
| | | | | | | | | 145 | 150 | 155 | | | | 160 | |
| Ser | Asn | Thr | Ser | Lys | Ile | Phe | Ser | Glu | Glu | Asn | Ser | Asp | Glu | Ile | Ile |
| | | | | | | | | 165 | 170 | 175 | | | | | |
| Lys | Leu | Leu | Gly | Asp | Val | Arg | Ieu | Asn | Ile | Leu | Val | Leu | Gly | Gly | Ser |
| | | | | | | | | 180 | 185 | 190 | | | | | |
| Ser | Gly | Phe | Ile | Glu | Leu | Tyr | Ala | Tyr | Gly | Met | Phe | Lys | Ile | | |
| | | | | | | | | 195 | 200 | 205 | 206 | | | | |

<210> 1456
<211> 100
<212>Amino acid
<213> Homo sapiens

| | | | | | | | | | | | | | | | | |
|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| | 1456 | | | | | | | | | | | | | | | |
| Pro | Arg | Asp | Pro | Val | Thr | Asp | Arg | Ala | Arg | Ala | Met | Pro | Arg | Arg | Gly | |
| | | | | | | | | 1 | 5 | 10 | 15 | | | | | |
| Leu | Val | Ala | Gly | Pro | Asp | Leu | Glu | Tyr | Phe | Gln | Arg | His | Tyr | Phe | Thr | |
| | | | | | | | | 20 | 25 | 30 | | | | | | |
| Pro | Ala | Glu | Val | Ala | Gln | His | Asn | Arg | Pro | Glu | Asp | Leu | Trp | Val | Ser | |
| | | | | | | | | 35 | 40 | 45 | | | | | | |
| Tyr | Leu | Gly | Arg | Val | Tyr | Asp | Leu | Thr | Ser | Leu | Ala | Gln | Glu | Tyr | Lys | |
| | | | | | | | | 50 | 55 | 60 | | | | | | |
| Gly | Asn | Leu | Leu | Leu | Lys | Pro | Ile | Val | Glu | Val | Ala | Gly | Gln | Asp | Ile | |
| | | | | | | | | 65 | 70 | 75 | | | | 80 | | |
| Ser | His | Trp | Phe | Asp | Pro | Lys | Thr | Arg | Asp | Val | Ser | Tyr | Ala | Gly | Thr | |

| | | |
|-----------------|-----|----|
| Trp Asp Cys Gly | 85 | 90 |
| | 100 | |

<210> 1457
<211> 159
<212>Amino acid
<213> Homo sapiens

<400> 1457

| | | |
|---|---|--|
| Arg Ile Pro Gly Arg Arg Phe Arg Ala Ala Phe Val Leu Gly Ser Ala | 1 5 10 15 | |
| Asn Val Ala Ser Ser Val Arg Leu Arg Cys Ser Phe Pro Leu Ser Leu | 20 25 30 | |
| Gly Gly Pro Ser Gly Pro Ala Ala Ala Ser Val Ala Leu Gly Pro Ala | 35 40 45 | |
| Gly Pro Gly Arg Ser Leu Gly Arg Thr Pro Asp Thr Gly Asp Trp Glu | 50 55 60 | |
| Met Asp Ser Val Ser Phe Glu Asp Val Ala Val Ala Phe Thr Gln Glu | 65 70 75 80 | |
| Glu Trp Ala Leu Leu Asp Pro Ser Gln Lys Asn Leu Tyr Arg Asp Val | 85 90 95 | |
| Met Gln Glu Ile Phe Arg Asn Leu Ala Ser Val Gly Asn Lys Ser Glu | 100 105 110 | |
| Asp Gln Asn Ile Gln Asp Asp Phe Lys Asn Pro Gly Arg Asn Leu Ser | 115 120 125 | |
| Ser His Val Val Glu Arg Leu Phe Glu Ile Lys Glu Gly Ser Gln Tyr | 130 135 140 | |
| Gly Glu Thr Phe Ser Gln Asp Ser Asn Leu Asn Leu Asn Lys Ile | 145 150 155 159 | |

<210> 1458
<211> 154
<212>Amino acid
<213> Homo sapiens

<400> 1458

| | | |
|---|---|--|
| Ser Leu Ser Leu Ser Val Ser Pro Phe Leu Arg Leu Ser Leu Gly Arg | 1 5 10 15 | |
| Val Gly Gly Met Ala Glu Glu Met Glu Ser Ser Leu Glu Ala Ser Phe | 20 25 30 | |
| Ser Ser Ser Gly Ala Val Ser Gly Ala Ser Gly Phe Leu Pro Pro Ala | 35 40 45 | |
| Arg Ser Arg Ile Phe Lys Ile Ile Val Ile Gly Asp Ser Asn Val Gly | 50 55 60 | |
| Lys Thr Cys Leu Thr Tyr Arg Phe Cys Ala Gly Arg Phe Pro Asp Arg | 65 70 75 80 | |
| Thr Glu Ala Thr Ile Gly Val Asp Phe Arg Glu Arg Ala Val Glu Ile | 85 90 95 | |
| Asp Gly Glu Arg Ile Lys Ile Gln Leu Trp Asp Thr Ala Gly Gln Glu | 100 105 110 | |
| Arg Phe Arg Lys Ser Met Val Gln His Tyr Tyr Arg Asn Val His Ala | 115 120 125 | |
| Val Val Phe Val Tyr Asp Met Thr Asn Met Ala Ser Phe His Ser Leu | | |

| | | |
|---|-----|-----|
| 130 | 135 | 140 |
| Pro Ser Trp Ile Glu Glu Cys Lys Gln His | | |
| 145 | 150 | 154 |

<210> 1459
<211> 136
<212>Amino acid
<213> Homo sapiens

| | | | | |
|---|---|-----|-----|----|
| <400> 1459 | | | | |
| Arg Arg Pro Ser Pro Gly Ser Ile Val Ile Met Ala Ala Glu Ser Asp | | | | |
| 1 | 5 | 10 | 15 | |
| Val Leu His Phe Gln Phe Glu Gln Gln Gly Asp Val Val Leu Gln Lys | | | | |
| 20 | | 25 | 30 | |
| Met Asn Leu Leu Arg Gln Gln Asn Leu Phe Cys Asp Val Ser Ile Tyr | | | | |
| 35 | | 40 | 45 | |
| Ile Asn Asp Thr Glu Phe Gln Gly His Lys Val Ile Leu Ala Ala Cys | | | | |
| 50 | | 55 | 60 | |
| Ser Thr Phe Met Arg Asp Gln Phe Leu Leu Thr Gln Ser Lys His Val | | | | |
| 65 | | 70 | 75 | 80 |
| Arg Ile Thr Ile Leu Gln Ser Ala Glu Val Gly Arg Lys Ile Leu Leu | | | | |
| 85 | | 90 | 95 | |
| Ser Cys Tyr Thr Gly Ala Leu Glu Val Lys Arg Lys Glu Leu Leu Lys | | | | |
| 100 | | 105 | 110 | |
| Tyr Leu Thr Ala Ala Ser Tyr Leu Gln Met Val His Ile Ala Glu Lys | | | | |
| 115 | | 120 | 125 | |
| Arg Thr Glu Ala Phe Val Lys Phe | | | | |
| 130 | | 135 | 136 | |

<210> 1460
<211> 219
<212>Amino acid
<213> Homo sapiens

| | | | | |
|---|---|-----|-----|----|
| <400> 1460 | | | | |
| Ala Glu Gly Leu Gln Ser Ala Ala Gly Ile Arg Ile Asp Thr Lys Ala | | | | |
| 1 | 5 | 10 | 15 | |
| Gly Pro Pro Glu Met Leu Lys Pro Leu Trp Lys Ala Ala Val Ala Pro | | | | |
| 20 | | 25 | 30 | |
| Thr Trp Pro Cys Ser Met Pro Pro Arg Arg Pro Trp Asp Arg Gln Ala | | | | |
| 35 | | 40 | 45 | |
| Gly Thr Leu Gln Val Leu Gly Ala Leu Ala Val Leu Trp Leu Gly Ser | | | | |
| 50 | | 55 | 60 | |
| Val Ala Leu Ile Cys Leu Leu Trp Gln Val Pro Arg Pro Pro Thr Trp | | | | |
| 65 | | 70 | 75 | 80 |
| Gly Gln Val Gln Pro Lys Asp Val Pro Arg Ser Trp Glu His Gly Ser | | | | |
| 85 | | 90 | 95 | |
| Ser Pro Ala Trp Glu Pro Leu Glu Ala Glu Ala Arg Gln Gln Arg Asp | | | | |
| 100 | | 105 | 110 | |
| Ser Cys Gln Leu Val Leu Val Glu Ser Ile Pro Gln Asp Leu Pro Ser | | | | |
| 115 | | 120 | 125 | |
| Ala Ala Gly Ser Pro Ser Ala Gln Pro Leu Gly Gln Ala Trp Leu Gln | | | | |
| 130 | | 135 | 140 | |
| Leu Leu Asp Thr Ala Gln Glu Ser Val His Val Ala Ser Tyr Tyr Trp | | | | |

| | | | |
|---|-----|-----|-----|
| 145 | 150 | 155 | 160 |
| Ser Leu Thr Gly Pro Asp Ile Gly Val Asn Asp Ser Ser Ser Gln Leu | | | |
| 165 | 170 | 175 | |
| Gly Glu Ala Leu Leu Gln Lys Leu Gln Gln Leu Leu Gly Arg Asn Ile | | | |
| 180 | 185 | 190 | |
| Ser Leu Ala Val Ala Thr Ser Ser Pro Thr Leu Ala Arg Thr Ser Thr | | | |
| 195 | 200 | 205 | |
| Asp Leu Gln Val Leu Ala Ala Arg Gly Ala His | | | |
| 210 | 215 | 219 | |

<210> 1461
<211> 80
<212>Amino acid
<213> Homo sapiens

| | | | | |
|---|----|----|----|----|
| <400> 1461 | 1 | 5 | 10 | 15 |
| Arg Lys Lys Lys Met Pro Leu Pro Phe Gly Leu Lys Leu Lys Arg Thr | | | | |
| 20 | 25 | 30 | | |
| Leu Leu Asn Asn Glu Phe Val Glu Phe Thr Leu Ser Val Glu Ser Thr | | | | |
| 35 | 40 | 45 | | |
| Gly Gln Glu Ser Leu Glu Ala Val Ala Gln Arg Leu Glu Leu Arg Glu | | | | |
| 50 | 55 | 60 | | |
| Val Thr Tyr Phe Ser Leu Trp Tyr Tyr Asn Lys Gln Asn Gln Arg Arg | | | | |
| 65 | 70 | 75 | 80 | |

<210> 1462
<211> 176
<212>Amino acid
<213> Homo sapiens

| | | | | |
|---|-----|-----|----|----|
| <400> 1462 | 1 | 5 | 10 | 15 |
| Leu Gln Pro Leu Ser Ser Trp Glu Ser Ala Ser Glu Val Thr Arg Ser | | | | |
| 20 | 25 | 30 | | |
| Pro Val Ser Pro Glu Asp Val Lys Gln Ala Thr Ser Asn Phe Glu Asn | | | | |
| 35 | 40 | 45 | | |
| Leu Gln Lys Gln Leu Ala Arg Lys Met Lys Leu Pro Ile Phe Ile Ala | | | | |
| 50 | 55 | 60 | | |
| Asp Ala Phe Thr Ala Arg Ala Phe Arg Gly Asn Pro Ala Ala Val Cys | | | | |
| 65 | 70 | 75 | 80 | |
| Glu Met Asn Leu Ser Glu Thr Ala Phe Ile Arg Lys Leu His Pro Thr | | | | |
| 85 | 90 | 95 | | |
| Asp Asn Phe Ala Gln Ser Ser Cys Phe Gly Leu Arg Trp Phe Thr Pro | | | | |
| 100 | 105 | 110 | | |
| Ala Ser Glu Val Pro Leu Cys Gly His Ala Thr Leu Ala Ser Ala Ala | | | | |
| 115 | 120 | 125 | | |
| Val Leu Phe His Lys Ile Lys Asn Met Asn Ser Thr Leu Thr Phe Val | | | | |
| 130 | 135 | 140 | | |
| Thr Leu Ser Gly Glu Leu Arg Ala Arg Arg Ala Glu Asp Gly Ile Val | | | | |

| | | | |
|---|-----|-----|-----|
| 145 | 150 | 155 | 160 |
| Leu Asp Leu Pro Leu Tyr Pro Ala His Pro Gln Asp Phe His Glu | | | * |
| 165 | | 170 | 175 |

<210> 1463
 <211> 150
 <212>Amino acid
 <213> Homo sapiens

| | | | |
|---|-----|-----|----|
| 1 | 5 | 10 | 15 |
| Ala Ala Asp Thr Met Gln Ser Asp Asp Val Ile Trp Asp Thr Leu Gly | | | |
| 35 | 40 | 45 | |
| Cys Arg Asn Glu Tyr Ser Leu Thr Gly Leu Cys Asn Arg Ser Ser Cys | | | |
| 50 | 55 | 60 | |
| Pro Leu Ala Asn Ser Gln Tyr Ala Thr Ile Lys Glu Glu Lys Gly Gln | | | |
| 65 | 70 | 75 | 80 |
| Cys Tyr Leu Tyr Met Lys Val Ile Glu Arg Ala Ala Phe Pro Arg Arg | | | |
| 85 | | 90 | 95 |
| Leu Trp Glu Arg Val Arg Leu Ser Lys Asn Tyr Glu Lys Ala Leu Glu | | | |
| 100 | 105 | 110 | |
| Gln Ile Asp Glu Asn Leu Ile Tyr Trp Pro Arg Phe Ile Arg His Lys | | | |
| 115 | 120 | 125 | |
| Cys Lys Gln Arg Phe Thr Lys Ile Thr Gln Tyr Leu Ile Arg Ile Arg | | | |
| 130 | 135 | 140 | |
| Ly ^s Leu Thr Leu Lys Arg Gln Arg Lys Leu Val Pro Leu Ser Lys Lys | | | |
| 145 | 150 | | |

<210> 1464
 <211> 86
 <212>Amino acid
 <213> Homo sapiens

| | | | |
|---|----|----|----|
| 1 | 5 | 10 | 15 |
| Phe Val Glu Arg Gly Leu Gly Asp Pro Ala Leu Pro Thr Leu Met Phe | | | |
| 20 | 25 | 30 | |
| Glu Glu Pro Glu Trp Ala Glu Ala Ala Pro Val Ala Ala Gly Leu Gly | | | |
| 35 | 40 | 45 | |
| Pro Val Ile Ser Arg Pro Pro Pro Ala Ala Ser Ser Gln Asn Lys Val | | | |
| 50 | 55 | 60 | |
| Ser Asp Ser Arg Glu Gln Trp Glu Leu Phe Gln Ala Ala Lys Arg Thr | | | |
| 65 | 70 | 75 | 80 |
| Leu Val Asp Pro Ser Ala Val Cys Ile Ala Gly Arg Asp Thr Cys Gly | | | |
| 85 | 86 | | |

<210> 1465
 <211> 286
 <212>Amino acid

<213> Homo sapiens

<400> 1465
 Val Val Glu Phe Leu Trp Ser Arg Arg Pro Ser Gly Ser Ser Asp Pro
 1 5 10 15
 Arg Pro Arg Arg Pro Ala Ser Lys Cys Gln Met Met Glu Glu Arg Ala
 20 25 30
 Asn Leu Met His Met Met Lys Leu Ser Ile Lys Val Leu Leu Gln Ser
 35 40 45
 Ala Leu Ser Leu Gly Arg Ser Leu Asp Ala Asp His Ala Pro Leu Gln
 50 55 60
 Gln Phe Phe Val Val Met Glu His Cys Leu Lys His Gly Leu Lys Val
 65 70 75 80
 Lys Lys Ser Phe Ile Gly Gln Asn Lys Ser Phe Phe Gly Pro Leu Glu
 85 90 95
 Leu Val Glu Lys Leu Cys Pro Glu Ala Ser Asp Ile Ala Thr Ser Val
 100 105 110
 Arg Asn Leu Pro Glu Leu Lys Thr Ala Val Gly Arg Gly Arg Ala Trp
 115 120 125
 Leu Tyr Leu Ala Leu Met Gln Lys Lys Leu Ala Asp Tyr Leu Lys Val
 130 135 140
 Leu Ile Asp Asn Lys His Leu Leu Ser Glu Phe Tyr Glu Pro Glu Ala
 145 150 155 160
 Leu Met Met Glu Glu Gly Met Val Ile Val Gly Leu Leu Val Gly
 165 170 175
 Leu Asn Val Leu Asp Ala Asn Leu Cys Leu Lys Gly Glu Asp Leu Asp
 180 185 190
 Ser Gln Val Gly Val Ile Asp Phe Ser Leu Tyr Leu Lys Asp Val Gln
 195 200 205
 Asp Leu Asp Gly Gly Lys Glu His Glu Arg Ile Thr Asp Val Leu Asp
 210 215 220
 Gln Lys Asn Tyr Val Glu Glu Leu Asn Arg His Leu Ser Cys Thr Val
 225 230 235 240
 Gly Asp Leu Gln Thr Lys Ile Asp Gly Leu Glu Lys Thr Asn Ser Lys
 245 250 255
 Leu Gln Glu Arg Val Ser Ala Ala Thr Asp Arg Ile Cys Ser Leu Gln
 260 265 270
 Glu Glu Gln Gln Leu Arg Glu Gln Asn Glu Leu Ile Arg
 275 280 285 286

<210> 1466
<211> 127
<212>Amino acid
<213> Homo sapiens

<400> 1466
 Gly Cys Tyr Ala Pro Ser Pro His Leu Gly Gly Ser Leu Thr Pro Arg
 1 5 10 15
 Phe Phe Pro Asn Gly Val Phe His Arg Arg Leu Pro Arg Pro Arg Pro
 20 25 30
 Pro Gln Pro Pro Ser Val Ser Ser Ala Pro Thr Leu Arg Pro Leu Cys
 35 40 45
 Ala His Phe Ser Leu Gly Lys Leu Arg Leu Arg Val Arg Lys Ser Ala
 50 55 60
 Glu Val Ala Pro Pro Arg Thr Glu Lys Gly Trp Gly Ser Ala Glu Pro

| | | | |
|--|-----|-----|-----|
| 65 | 70 | 75 | 80 |
| Arg His Ser Arg Ala Pro Leu Gly L ^e u Gln Gly Leu Arg Met Ala Ala | | | |
| 85 | 90 | 95 | |
| Ser Ala Gln Val Ser Val Thr Phe Glu Asp Val Ala Val Thr Phe Thr | | | |
| 100 | 105 | 110 | |
| Gln Glu Glu Trp Gly Gln Leu Asp Ala Ala Gln Arg Thr Leu Tyr | | | |
| 115 | 120 | 125 | 127 |

<210> 1467
<211> 146
<212>Amino acid
<213> Homo sapiens

| | | | |
|---|-----|-----|----|
| <400> 1467 | | | |
| Phe Arg Gly Ser Ieu Ser Ser Pro Ser Ser Leu Arg Gly Arg Arg Leu | | | |
| 1 | 5 | 10 | 15 |
| Val Thr Gly Gln Thr Ser Pro Arg Gly Thr Trp Cys Leu Tyr Pro Gly | | | |
| 20 | 25 | 30 | |
| Phe Cys Arg Ser Val Ala Cys Ala Met Pro Cys Cys Ser His Arg Ser | | | |
| 35 | 40 | 45 | |
| Cys Arg Glu Asp Pro Gly Thr Ser Glu Ser Arg Glu Met Asp Pro Val | | | |
| 50 | 55 | 60 | |
| Val Phe Glu Asp Val Ala Val Asn Phe Thr Gln Glu Glu Trp Thr Leu | | | |
| 65 | 70 | 75 | 80 |
| Leu Asp Ile Ser Gln Lys Asn Leu Phe Arg Glu Val Met Leu Glu Thr | | | |
| 85 | 90 | 95 | |
| Phe Arg Asn Leu Thr Ser Ile Gly Lys Lys Trp Ser Asp Gln Asn Ile | | | |
| 100 | 105 | 110 | |
| Glu Tyr Glu Tyr Gln Asn Pro Arg Arg Ser Phe Arg Ser Leu Ile Glu | | | |
| 115 | 120 | 125 | |
| Glu Lys Val Asn Glu Ile Lys Glu Asp Ser His Cys Gly Glu Thr Phe | | | |
| 130 | 135 | 140 | |
| Thr Gln | | | |
| 145 146 | | | |

<210> 1468
<211> 44
<212>Amino acid
<213> Homo sapiens

| | | | |
|---|----|----|----|
| <400> 1468 | | | |
| Leu Asn Phe Ala Asn Ser Ala Ala Phe Ala Val Thr Met Pro Gln Asn | | | |
| 1 | 5 | 10 | 15 |
| Glu Tyr Ile Glu Leu His Arg Lys Arg Tyr Gly Phe Arg Leu Asp Tyr | | | |
| 20 | 25 | 30 | |
| His Glu Lys Lys Arg Lys Lys Gln Ser Arg Glu Ala | | | |
| 35 | 40 | 44 | |

<210> 1469
<211> 198
<212>Amino acid
<213> Homo sapiens

<210> 1470
<211> 178
<212>Amino acid
<213> Homo sapiens

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<400> 1470
Trp Glu Ser Asp Val Gly Glu Gly Leu Arg Pro Pro Pro Pro Pro Pro Pro
      5          10          15
Pro Pro Gly Arg Arg Arg Thr Gln Glu Pro Arg Ala Arg Asp Ala Ala
      20          25          30
Thr Val Ile Phe Ala Cys Pro Ala Ala Leu Leu Glu Thr Leu Ile Ala
      35          40          45
Tyr Gly Ser Ser Pro Ser Phe Cys Lys His Arg Ala Ala Arg Pro
      50          55          60
Leu Ile Phe Leu Leu His Arg Leu Thr Ala Glu Ala Thr Ala Arg Cys
      65          70          75          80
Pro Ile Cys Ala Leu Glu Ala Arg Asn Pro Gly Arg Trp Gly Ile Cys
      85          90          95
Ala Ser Trp Pro Gly Met Lys Thr Pro Phe Gly Lys Ala Ala Ala Gly
      100         105         110
Gln Arg Ser Arg Thr Gly Ala Gly His Gly Ser Val Ser Val Thr Met
      115         120         125
Ile Lys Arg Lys Ala Ala His Lys Lys His Arg Ser Arg Pro Thr Ser
      130         135         140
Gln Pro Arg Gly Asn Ile Val Gly Cys Ile Ile Gln His Gly Trp Lys
      145         150         155         160
Asp Gly Asp Glu Pro Leu Thr Gln Trp Lys Gly Thr Val Leu Asp Gln

```

| | | | |
|----------------|-----|-----|-----|
| Leu Leu 178 | 165 | 170 | 175 |
|----------------|-----|-----|-----|

<210> 1471
 <211> 253
 <212>Amino acid
 <213> Homo sapiens

| |
|--|
| <400> 1471 Arg Asp Leu Gly Val Ala Leu Glu Ala Phe Gln Trp Ala Arg Ala Gly 1 5 10 15 Asp Cys Gly Ser Gly Ala Gly Arg Ala Gly Gly Glu Gly Val Asp Ala 20 25 30 Gly Arg Arg Val Pro Glu Arg Gln His Arg Gly Arg Gly Gly Gly Gly 35 40 45 Glu Pro Gly Arg Arg Gln Arg Gly Gly Arg Arg Gln Arg Ser Ser Ser 50 55 60 Arg Arg Ser Gly Gly Asp Gly Gly Asp Glu Val Glu Gly Ser Gly Val 65 70 75 80 Gly Ala Gly Glu Gly Glu Thr Val Gln His Phe Pro Leu Ala Arg Pro 85 90 95 Lys Ser Leu Met Gln Lys Leu Gln Cys Ser Phe Gln Thr Ser Trp Leu 100 105 110 Lys Asp Phe Pro Trp Leu Arg Tyr Ser Lys Asp Thr Gly Leu Met Ser 115 120 125 Cys Gly Trp Cys Gln Lys Thr Pro Ala Asp Gly Gly Ser Val Asp Leu 130 135 140 Pro Pro Val Gly His Asp Glu Leu Ser Arg Gly Thr Arg Asn Tyr Lys 145 150 155 160 Lys Thr Leu Leu Arg His His Val Ser Thr Glu His Lys Leu His 165 170 175 Glu Ala Asn Ala Gln Glu Ser Glu Ile Pro Ser Glu Glu Gly Tyr Cys 180 185 190 Asp Phe Asn Ser Arg Pro Asn Glu Asn Ser Tyr Cys Tyr Gln Leu Leu 195 200 205 Arg Gln Leu Asn Glu Gln Arg Lys Lys Gly Ile Leu Cys Asp Val Ser 210 215 220 Ile Val Val Ser Gly Ile Phe Lys Ala His Lys Asn Ile Leu Val 225 230 235 240 Ala Gly Ser Arg Phe Phe Lys Thr Leu Tyr Cys Phe Ser 245 250 253 |
|--|

<210> 1472
 <211> 147
 <212>Amino acid
 <213> Homo sapiens

| |
|--|
| <400> 1472 Ser Leu Arg Ala Ala Ala Ala Met Ala Asp Val Thr Ala Arg Ser Leu 1 5 10 15 Gln Tyr Glu Tyr Lys Ala Asn Ser Asn Leu Val Leu Gln Ala Asp Arg 20 25 30 Ser Leu Ile Asp Arg Thr Arg Arg Asp Glu Pro Thr Gly Glu Val Leu |
|--|

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ser | Leu | Val | Gly | Lys | Leu | Glu | Gly | Thr | Arg | Met | Gly | Asp | Lys | Ala | Gln |
| 35 | | | | | 40 | | | | | | 45 | | | | |
| | 50 | | | | | 55 | | | | | 60 | | | | |
| Arg | Thr | Lys | Pro | Gln | Met | Gln | Glu | Glu | Arg | Arg | Ala | Lys | Arg | Arg | Lys |
| 65 | | | | | 70 | | | | | | 75 | | | | 80 |
| Arg | Asp | Glu | Asp | Arg | His | Asp | Ile | Asn | Lys | Met | Lys | Gly | Tyr | Thr | Leu |
| | | | | | 85 | | | | | 90 | | | | 95 | |
| Leu | Ser | Glu | Gly | Ile | Asp | Glu | Met | Val | Gly | Ile | Ile | Tyr | Lys | Pro | Lys |
| | | | | | 100 | | | | | 105 | | | | 110 | |
| Thr | Lys | Glu | Thr | Arg | Glu | Thr | Tyr | Glu | Val | Leu | Leu | Ser | Phe | Ile | Gln |
| | 115 | | | | | 120 | | | | | | 125 | | | |
| Ala | Ala | Leu | Gly | Asp | Gln | Pro | Arg | Asp | Ile | Leu | Cys | Gly | Ala | Ala | Asp |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| Glu | Val | Leu | | | | | | | | | | | | | |
| 145 | | 147 | | | | | | | | | | | | | |

<210> 1473
<211> 139
<212>Amino acid
<213> Homo sapiens

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Cys | Asn | Ser | Ala | Glu | Ser | Arg | Met | Asp | Val | Leu | Phe | Val | Ala | Ile | Phe |
| 1 | | | | 5 | | | | | 10 | | | | 15 | | |
| Ala | Val | Pro | Leu | Ile | Leu | Gly | Gln | Tyr | Glu | Asp | Glu | Glu | Arg | Leu | |
| | | | | 20 | | | | | 25 | | | | 30 | | |
| Gly | Glu | Asp | Glu | Tyr | Tyr | Gln | Val | Val | Tyr | Tyr | Tyr | Tyr | Thr | Val | Thr |
| | 35 | | | | | 40 | | | | | | | 45 | | |
| Ser | Tyr | Asp | Asp | Phe | Ser | Ala | Asp | Phe | Thr | Ile | Asp | Tyr | Ser | Ile | Phe |
| | 50 | | | | | 55 | | | | | 60 | | | | |
| Glu | Ser | Glu | Asp | Arg | Leu | Asn | Arg | Leu | Asp | Lys | Asp | Ile | Thr | Glu | Ala |
| | 65 | | | | | 70 | | | | | 75 | | | 80 | |
| Ile | Glu | Thr | Thr | Ile | Ser | Leu | Glu | Thr | Ala | Arg | Ala | Asp | His | Pro | Lys |
| | | | | 85 | | | | | 90 | | | | 95 | | |
| Pro | Val | Thr | Val | Lys | Pro | Val | Thr | Glu | Pro | Gln | Ser | Pro | Asp | Leu | |
| | 100 | | | | | 105 | | | | | | 110 | | | |
| Asn | Asp | Ala | Val | Ser | Ser | Leu | Arg | Ser | Pro | Ile | Pro | Leu | Leu | Leu | Ser |
| | 115 | | | | | 120 | | | | | 125 | | | | |
| Cys | Ala | Phe | Val | Gln | Val | Gly | Met | Tyr | Phe | Met | | | | | |
| | 130 | | | | | 135 | | | | | 139 | | | | |

<210> 1474
<211> 185
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> {1}...{185}
<223> X = any amino acid or stop code

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Phe | Val | Arg | Gly | Pro | Gly | Glu | Glu | Gln | Ala | Pro | Ala | Phe | Arg | Lys | Pro |
| 1 | | | | | | 5 | | | | | 10 | | | 15 | |

Ala Pro Gly Ala Met Gly Ala Gln Val Arg Leu Pro Pro Gly Glu Pro
 20 25 30
 Cys Arg Glu Gly Tyr Val Leu Ser Leu Val Cys Pro Asn Ser Ser Gln
 35 40 45
 Ala Trp Cys Glu Ile Thr Asn Val Ser Gln Leu Leu Ala Ser Pro Val
 50 55 60
 Leu Tyr Thr Asp Leu Asn Tyr Ser Ile Asn Asn Leu Ser Ile Ser Ala
 65 70 75 80
 Asn Val Glu Asn Lys Tyr Ser Leu Tyr Val Gly Leu Val Leu Ala Val
 85 90 95
 Ser Ser Ser Ile Phe Ile Gly Ser Ser Phe Ile Leu Lys Lys Lys Gly
 100 105 110
 Leu Leu Gln Leu Ala Ser Lys Gly Phe Thr Arg Ala Gly Gln Gly Gly
 115 120 125
 His Ser Tyr Leu Lys Glu Trp Leu Trp Trp Val Gly Leu Ieu Ser Ile
 130 135 140
 Leu Ser Trp Asn Ala Arg Glu Lys Val Asp Leu Xaa Asn Ile Thr Phe
 145 150 155 160
 Xaa Pro Gln Thr Ser Cys Ile Phe Phe Thr Ile Thr Ile Glu Lys Ser
 165 170 175
 Thr Phe Leu Ser Tyr Phe Pro Thr Ser
 180 185

<210> 1475

<211> 91

<212>Amino acid

<213> Homo sapiens

 <400> 1475
 Ala Arg Gly Ser Cys Pro Thr Arg Pro Arg Pro Ala Asn Gly Arg Met
 1 5 10 15
 Ala Glu Thr Lys Asp Ala Ala Gln Met Leu Val Thr Phe Lys Asp Val
 20 25 30
 Ala Val Thr Phe Thr Arg Glu Glu Trp Arg Gln Leu Asp Leu Ala Gln
 35 40 45
 Arg Thr Leu Tyr Arg Glu Val Met Leu Glu Thr Cys Gly Leu Leu Val
 50 55 60
 Ser Leu Gly His Arg Val Pro Lys Pro Glu Leu Val His Leu Leu Lys
 65 70 75 80
 His Gly Gln Glu Leu Trp Ile Val Lys Arg Gly
 85 90 91

<210> 1476

<211> 159

<212>Amino acid

<213> Homo sapiens

 <400> 1476
 Tyr Thr Met Leu Arg Gly Thr Met Thr Ala Trp Arg Gly Met Arg Pro
 1 5 10 15
 Glu Val Thr Leu Ala Cys Leu Leu Leu Ala Thr Ala Gly Cys Phe Ala
 20 25 30
 Asp Leu Asn Glu Val Pro Gln Val Thr Val Gln Pro Ala Ser Thr Val
 35 40 45

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gln | Lys | Pro | Gly | Gly | Thr | Val | Ile | Leu | Gly | Cys | Val | Val | Glu | Pro | Pro |
| 50 | | | | | | 55 | | | | | 60 | | | | |
| Arg | Met | Asn | Val | Thr | Trp | Arg | Leu | Asn | Gly | Lys | Glu | Leu | Asn | Gly | Ser |
| 65 | | | | | | 70 | | | | 75 | | | | | 80 |
| Asp | Asp | Ala | Leu | Gly | Val | Leu | Ile | Thr | His | Gly | Thr | Leu | Val | Ile | Thr |
| | | | | | | 85 | | | 90 | | | | | | 95 |
| Ala | Leu | Asn | Asn | His | Thr | Val | Gly | Arg | Tyr | Gln | Cys | Val | Ala | Arg | Met |
| | | | | | | 100 | | | 105 | | | | | | 110 |
| Pro | Ala | Gly | Ala | Val | Ala | Ser | Val | Pro | Ala | Thr | Val | Thr | Leu | Ala | Ser |
| | | | | | | 115 | | | 120 | | | | | | 125 |
| Glu | Ser | Ala | Pro | Leu | Pro | Pro | Cys | His | Gly | Ala | Val | Pro | Pro | His | Leu |
| | | | | | | 130 | | | 135 | | | | | | 140 |
| Ser | His | Pro | Glu | Ala | Pro | Thr | Ile | His | Ala | Ala | Ser | Cys | Tyr | Ser | |
| | | | | | | 145 | | | 150 | | | 155 | | | 159 |

<210> 1477
<211> 139
<212>Amino acid
<213> Homo sapiens

| | | | | | | | | | | | | | | | |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <400> 1477 | | | | | | | | | | | | | | | |
| Trp | Gly | Arg | Arg | Arg | Gln | Leu | Val | Ser | Glu | Ala | Ala | Arg | Ala | Gln | Gly |
| 1 | | | | | | 5 | | | 10 | | | | | | 15 |
| Asp | Pro | Val | Cys | Ser | Thr | Met | Ser | Glu | Glu | Ala | Ala | Gln | Ile | Pro | |
| | | | | | | 20 | | | 25 | | | | | | 30 |
| Arg | Ser | Ser | Val | Trp | Glu | Gln | Asp | Gln | Gln | Asn | Val | Val | Gln | Arg | Val |
| | | | | | | 35 | | | 40 | | | | | | 45 |
| Val | Ala | Leu | Pro | Leu | Val | Arg | Ala | Thr | Cys | Thr | Ala | Val | Cys | Asp | Val |
| | | | | | | 50 | | | 55 | | | | | | 60 |
| Tyr | Ser | Ala | Ala | Lys | Asp | Arg | His | Pro | Leu | Leu | Gly | Ser | Ala | Cys | Arg |
| | | | | | | 65 | | | 70 | | | 75 | | | 80 |
| Leu | Ala | Glu | Asn | Cys | Val | Cys | Gly | Leu | Thr | Thr | Arg | Ala | Leu | Asp | His |
| | | | | | | 85 | | | 90 | | | | | | 95 |
| Ala | Gln | Pro | Leu | Leu | Glu | His | Leu | Gln | Pro | Gln | Leu | Ala | Thr | Met | Asn |
| | | | | | | 100 | | | 105 | | | | | | 110 |
| Ser | Leu | Ala | Cys | Arg | Gly | Leu | Asp | Lys | Leu | Glu | Glu | Lys | Leu | Pro | Phe |
| | | | | | | 115 | | | 120 | | | | | | 125 |
| Leu | Gln | Gln | Pro | Ser | Glu | Thr | Val | Val | Thr | Ser | | | | | |
| | | | | | | 130 | | | 135 | | | | | | 139 |

<210> 1478
<211> 331
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(331)
<223> X = any amino acid or stop code

| | | | | | | | | | | | | | | | |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <400> 1478 | | | | | | | | | | | | | | | |
| Ala | Lys | Ala | Phe | Thr | Met | Ala | Glu | Ser | Pro | Gly | Cys | Cys | Ser | Val | Trp |
| 1 | | | | | | 5 | | | | 10 | | | | | 15 |
| Ala | Arg | Cys | Leu | His | Cys | Ieu | Tyr | Ser | Cys | His | Trp | Arg | Lys | Cys | Pro |

| | | | |
|---|-----|-----|-----|
| 20 | 25 | 30 | |
| Arg Glu Arg Met Gln Thr Ser Lys Cys Asp Cys Ile Trp Phe Gly Leu | | | |
| 35 | 40 | 45 | |
| Leu Phe Leu Thr Phe Leu Leu Ser Leu Ser Trp Leu Tyr Ile Gly Leu | | | |
| 50 | 55 | 60 | |
| Val Leu Leu Asn Asp Leu His Asn Phe Asn Glu Phe Leu Phe Arg Arg | | | |
| 65 | 70 | 75 | 80 |
| Trp Gly His Trp Met Asp Trp Ser Leu Ala Phe Leu Leu Val Ile Ser | | | |
| 85 | 90 | 95 | |
| Leu Leu Gly Thr Tyr Ala Ser Leu Leu Leu Val Leu Ala Leu Leu Leu | | | |
| 100 | 105 | 110 | |
| Arg Leu Cys Arg Gln Pro Leu His Leu His Ser Leu His Lys Val Leu | | | |
| 115 | 120 | 125 | |
| Leu Leu Leu Ile Met Leu Leu Val Ala Ala Gly Leu Val Gly Leu Asp | | | |
| 130 | 135 | 140 | |
| Ile Gln Trp Gln Gln Glu Arg His Ser Leu Arg Val Ser Leu Gln Asp | | | |
| 145 | 150 | 155 | 160 |
| Cys Arg Xaa Leu Xaa Thr Pro Ala Val Arg Pro Xaa Glu Glu Ser Gly | | | |
| 165 | 170 | 175 | |
| Glu Gly His Trp Arg Arg Ala His Leu Thr Ser Ser Cys Pro Gln Ala | | | |
| 180 | 185 | 190 | |
| Thr Ala Pro Phe Leu His Ile Gly Ala Ala Gly Ile Ala Leu Leu | | | |
| 195 | 200 | 205 | |
| Ala Trp Pro Val Ala Asp Thr Phe Tyr Arg Ile His Arg Arg Glu Pro | | | |
| 210 | 215 | 220 | |
| Lys Ile Leu Leu Leu Leu Phe Phe Gly Val, Val Leu Val Ile Tyr | | | |
| 225 | 230 | 235 | 240 |
| Leu Ala Pro Leu Cys Ile Ser Ser Pro Cys Ile Met Glu Pro Arg Asp | | | |
| 245 | 250 | 255 | |
| Leu Pro Pro Lys Pro Gly Leu Val Gly His Arg Gly Ala Pro Met Leu | | | |
| 260 | 265 | 270 | |
| Ala Pro Glu Asn Thr Leu Met Ser Leu Arg Lys Thr Ala Glu Cys Gly | | | |
| 275 | 280 | 285 | |
| Ala Thr Val Phe Glu Thr Asp Val Met Val Ser Ser Asp Gly Val Pro | | | |
| 290 | 295 | 300 | |
| Phe Leu Met His Asp Glu His Leu Ser Arg Thr Thr Asn Val Ala Ser | | | |
| 305 | 310 | 315 | 320 |
| Val Phe Pro Thr Arg Ile Thr Ala His Ser Ser | | | |
| 325 | 330 | 331 | |